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Water Resources Data for Arizona, Water Year 1974. Part 2. Water Quality Records

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1975

PB 287171

1974

Water Resources Data for Arizona

Water Year 1974

Part 2. Water Quality Records

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UNITED STATES
DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AZ-74-2

Prepared in cooperation with the State of Arizona
and other agencies

200

CALENDAR FOR WATER YEAR 1974

1973

OCTOBER

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1974

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SEPTEMBER

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Water resources data for the 1974 water year for Arizona consist of records of discharge and water quality of streams, and water quality of lakes and reservoirs. This report contains water quality for 56 gaging stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Arizona.

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Water Resources Data for Arizona

Water Year 1974

Part 2. Water Quality Records

UNITED STATES
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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AZ-74-2

Prepared in cooperation with the State of Arizona
and with other agencies

Prepared in cooperation with

Bureau of Reclamation, U.S. Department of the Interior
Environmental Protection Agency, U.S. Department of the Interior
Soil Conservation Service, U.S. Department of Agriculture
Arizona Water Commission
Metropolitan Water District of Southern California

Water resources records, 1974, for Arizona are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Arizona
   Part 1. Surface Water Records

2. Water Resources Data for Arizona
   Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
301 W. Congress Street
Tucson, Arizona 85701

1975
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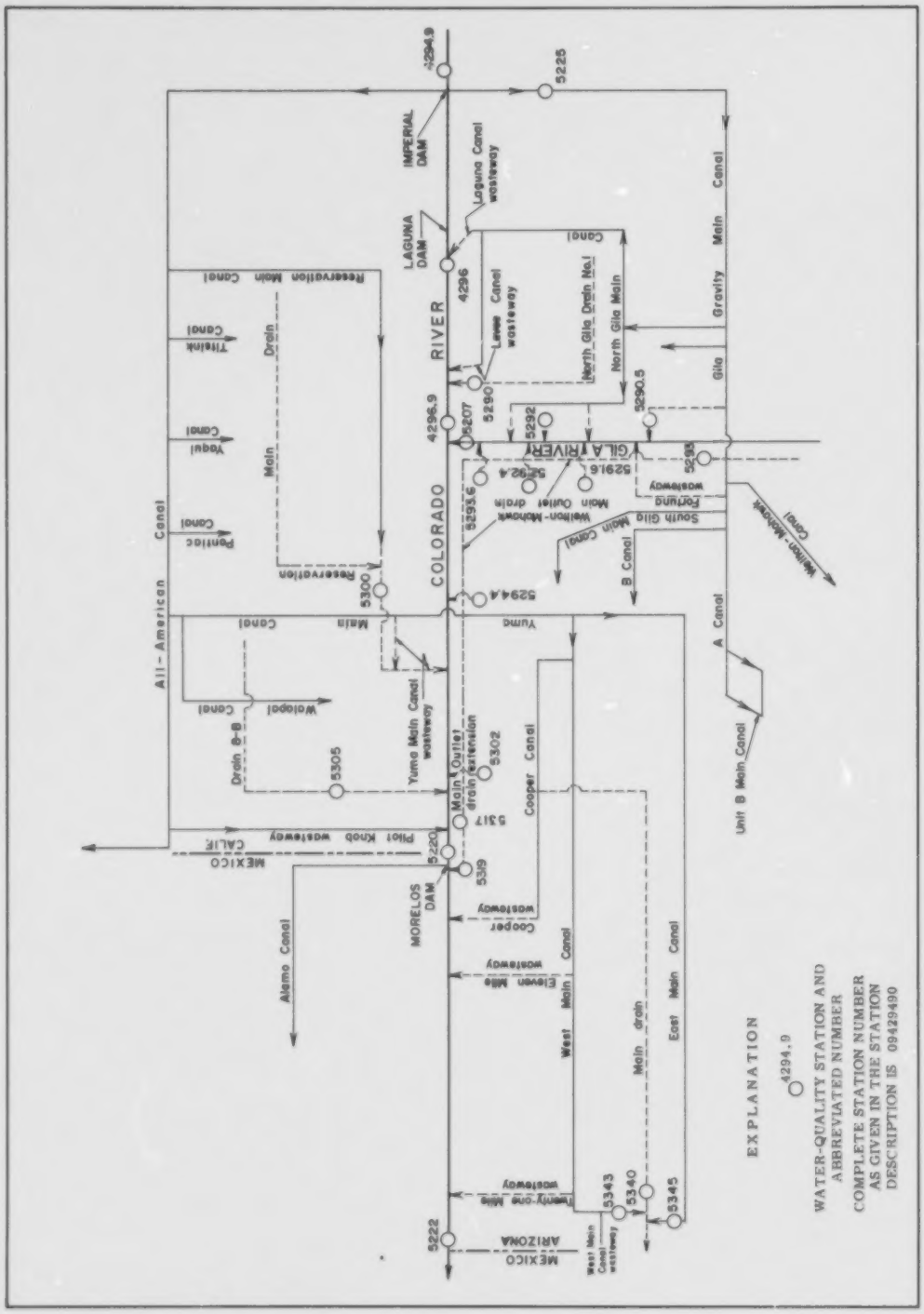

FIGURE 2.--SCHEMATIC DIAGRAM SHOWING WATER-QUALITY STATIONS ON STREAMS, DIVERSIONS, AND RETURN FLOWS BETWEEN IMPERIAL DAM AND THE SOUTHERLY INTERNATIONAL BOUNDARY, 1974 WATER YEAR.

WATER RESOURCES DATA FOR ARIZONA, 1974

PART 2. WATER QUALITY RECORDS

INTRODUCTION

Water resources data for the 1974 water year for Arizona include records of data for the chemical, physical, and biological characteristics of surface water. Water-quality data were collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly, or less frequently; at some sites, data were recorded continuously on charts. Records are given for 83 sampling stations of which 56 are continuous-record stations, 3 are partial-record stations, and 24 are miscellaneous sites. Locations of surface-water quality stations are shown in figures 1 and 2. A few pertinent stations in bordering States are also included. The records were collected by the Water Resources Division of the U.S. Geological Survey under the direction of H. M. Babcock, district chief. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Arizona.

The Geological Survey has published records of chemical quality, water temperatures, and sediment since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Beginning with the 1964 water year, water-quality records have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year. These records will be published later in Geological Survey water-supply papers.

COOPERATION

Assistance in the form of funds or services was given by the Bureau of Reclamation, Environmental Protection Agency, U.S. Department of the Interior; Soil Conservation Service, U.S. Department of Agriculture; International Boundary and Water Commission, Department of State; Arizona Water Commission; Salt River Valley Water Users'

Association; and Metropolitan Water District of Southern California. Several stations were operated from funds appropriated directly to the Geological Survey.

Water-quality data from Lake Mead at Hoover Dam were furnished by the Metropolitan Water District of Southern California.

DEFINITION OF TERMS

Terms related to water-quality and hydrologic data, as used in this report are defined below. Also see table 5, "Factors for conversion of English units to International System Units (SI)."

Acre-foot (ac-ft, AC-FT) is a quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic metres.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria, which ferment lactose with gas formation within 48 hours at 35° C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35° C ± 1.0° C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml (millilitres) of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as

all organisms which produce blue colonies within 24 hours when incubated at 44.5° C ± 0.2° C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35° C ± 1.0° C on M-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Bed material is the shifting portion of fragmented alluvial material of which the streambed is composed.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash weight is the weight or amount of residue present after the residue from the dry weight determination has been ashed in a muffle furnace at a temperature of 500° C for 1 hour. The ash weight values of zooplankton and phytoplankton are expressed in g/m^3 (grams per cubic metre), and periphyton and benthic organisms in g/m^2 (grams per square metre).

Dry weight refers to the weight of residue present after drying in an oven at 60° C for zooplankton and 105° C for periphyton, until the weight remains unchanged. This weight represents the total organic matter, ash and sediment, in the sample. Dry weight values are expressed in the same units as ash weight.

Organic weight or volatile weight of the living substance is the difference between the dry weight and the ash weight, and represents the actual weight of the living matter. The organic weight is expressed in the same units as for ash and dry weights.

Wet weight is the weight of living matter plus contained water.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, 646,317 gallons or 2,447 cubic metres. It represents a runoff of 0.0372 inches from 1 square mile or 0.3468 millimetre from 1 square kilometre.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Continuing-record station is a specified site which meets at least one of the following conditions:

1. Chemical-quality samples collected monthly or more frequently.

2. Water-temperature measurements made once or more times daily.

3. Sediment-discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

Cubic foot per second (cfs, CFS) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic metres per second.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given period of time.

Mean discharge is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a given time.

Drainage area of a stream at a specified location is that area, measured in horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Micrograms per litre (μg/l, UG/L) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (litre) of water. One thousand micrograms per litre is equivalent to one milligram per litre.

Milligrams per litre (mg/l, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre represents the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying by the factors in table 1. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2.

Miscellaneous site is a location other than continuous- or partial-record stations where random samples are collected to give better areal coverage of water-quality conditions in a river basin.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as NH_4^{+1} . . .	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})	.00965
Bicarbonate (HCO_3^{-1}) .	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2}) . .	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})* . .	.03640
Carbonate (CO_3^{-2}) . . .	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate (NO_3^{-1})	.01613
Chromium (Cr^{+6})* . . .	.11539	Nitrite (NO_2^{-1})	.02174
Cobalt (Co^{+2})*	.03394	Phosphate (PO_4^{-3}) . .	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})* . . .	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

*Constituent reported in micrograms per litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million*

(All values calculated to three significant figures)

Range of concentration in 1,000 mg/l	Divide by	Range of concentration in 1,000 mg/l	Divide by
0 - 8	1.00	411 - 424	1.26
8.05 - 24	1.01	427 - 440	1.27
24.2 - 40	1.02	443 - 457	1.28
40.5 - 56	1.03	460 - 473	1.29
56.5 - 72	1.04	476 - 489	1.30
72.5 - 88	1.05	492 - 506	1.31
88.5 - 104	1.06	508 - 522	1.32
105 - 120	1.07	524 - 538	1.33
121 - 136	1.08	540 - 554	1.34
137 - 152	1.09	556 - 570	1.35
153 - 169	1.10	572 - 585	1.36
170 - 185	1.11	587 - 602	1.37
186 - 200	1.12	604 - 617	1.38
201 - 217	1.13	619 - 634	1.39
218 - 232	1.14	636 - 650	1.40
234 - 248	1.15	652 - 666	1.41
250 - 264	1.16	668 - 682	1.42
266 - 280	1.17	684 - 698	1.43
282 - 297	1.18	700 - 715	1.44
299 - 313	1.19	717 - 730	1.45
315 - 329	1.20	732 - 747	1.46
331 - 345	1.21	749 - 762	1.47
347 - 361	1.22	765 - 780	1.48
363 - 378	1.23	782 - 796	1.49
380 - 393	1.24	798 - 810	1.50
395 - 409	1.25		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multi-celled and are counted according to the number of contained cells per sample volume, usually millilitres (ml) or litres (l).

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square metres (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually millilitres (ml) or litres (l). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimetres (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	.004 - .062	Sedimentation
Sand	.062 - 2.0	Sedimentation or sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per 100 ml of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per 100 ml of sample.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and

cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

> Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.
>
> Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times milligrams per litre times 0.0027.
>
> Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per litre of water-sediment mixture (mg/l).
>
> Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour period.

Seston is the total suspended particulate matter in water. The concentration of particulate matter has a profound effect upon the optical properties of the water, and upon the concentration of dissolved materials in the water. Their concentrations are expressed as number of colonies per 100 ml of sample.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimetre

at 25° C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per litre) is about 65 percent of the specific conductance (in micromhos per centimetre at 25° C). This relation is not constant from stream to stream, and it may even vary in the same source with changes in the composition of the water.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The use of artificial substrates simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per litre by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir. Also see table 5, "Factors for conversion of English units to International System Units (SI)."

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and the general distribution of water in the principal river basins of the conterminous United States and Alaska.

National stream-quality accounting network is an accounting network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin

accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-to-year basis and (2) to detect and assess long-term changes in stream quality.

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in stream water used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example, ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in ug/l (micrograms per litre), radium as radium-226 in PC/L,

(pCi/l, picocuries per litre), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per litre (ug/l). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay sized) sediments in the samples are also determined.

A picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Tritium network is a network of tritium-sampling stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Tritium concentrations are reported in terms of tritium units (TU); one TU is equal to 3.2436 picocuries per litre.

DOWNSTREAM ORDER AND STATION NUMBERS

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each water-quality station, gaging station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are

not consecutive. The complete 8-digit number for each station, such as 09380000, which appears just to the left of the station name and includes the 2-digit part number "09" plus the 6-digit downstream order number "380000." The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 9—Colorado River basin. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

NUMBERING SYSTEM FOR MISCELLANEOUS SITES

Downstream order station numbers are not assigned to miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The miscellaneous site numbering system of the U. S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits is a sequential number for sites within a 1-second grid. For example, the station number for a surface-water quality miscellaneous site with lat 34° 28'47", long 112° 41'04" would be 342847112410400. In the event that the latitude-longitude coordinates for two or more miscellaneous sites are the same, sequential numbers "01," "02," etc., are assigned.

EXPLANATION OF WATER QUALITY DATA

Collection and Examination of Data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment discharges. Discharge records for streams in Arizona have been released in the report, "Water Resources Data for Arizona, 1974, Part 1. Surface Water Records."

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the

sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium-adsorption-ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder (thermograph) furnishes information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (° F). In October 1967, the U. S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per litre (mg/l) and water temperatures in degrees Celsius (centigrade, ° C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per litre instead of milligrams per litre. (See section entitled "Definition of Terms.")

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman. The method for determining elemental

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*

(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

constituents by emission spectrographic techniques is described by Barnett and Mallory. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar; Lamar, Goerlitz, and Law; and Goerlitz and Brown. The collection and analysis of aquatic biological and microbiological samples are described by Slack and others.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and

mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

The daily chemical-quality data in this report represent equal-volume composites for 2- to 30-day periods; the composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

At many sites chemical-quality data were collected less frequently than daily. Although the data represent conditions only at the time of sampling, observations obtained over a period of years show relations that are useful in determining the long-term chemical-quality characteristics of the stream.

For chemical-quality stations equipped with noncontinuous-digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey district office at the address given on the back of the title page of this report.

When dissolved solids are reported in an analysis as both "residue at 180°C" and "sum of constituents," the values for "tons per day" and "tons per acre-foot" are calculated using the "residue at 180°C."

Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water

temperatures are usually taken at about the same time each day when sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment-discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment discharges for other periods of similar water discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

Table 4 shows the annual series of water-supply papers that give information on quality of surface waters in Arizona. Data for the Colorado River basin are given in Part 9.

Table 4.--Annual series of water-supply papers on quality of surface waters in Arizona

Water year	Water-supply paper number	Parts Included	Water year	Water-supply paper number	Parts Included
1941	942	1-14	1956	1453	9-14
1942	950	1-14	1957	1523	9-14
1943	970	1-14	1958	1574	9-14
1944	1022	1-14	1959	1645	9-14
1945	1030	1-14	1960	1745	9-14
1946	1050	1-14	1961	1885	9-14
1947	1102	1-14	1962	1945	9-14
1948	1133	7-14	1963	1951	9-14
1949	1163	7-14	1964	1958	9-11
1950	1189	9-14	1965	1965	9-11
1951	1200	9-14	1966	1995	9-11
1952	1253	9-14	1967	2015	9-11
1953	1293	9-14	1968	2098	9-10
1954	1353	9-14	1969	2148	9-10
1955	1403	9-14			

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Table 5.--Factors for conversion of English units to International System Units (SI)

[The following factors may be used to convert the English units published herein to the International System of Units (SI)]

Multiply English units	By	To obtain SI units
feet (ft)	0.3048	metres (m)
miles (mi)	1.609	kilometres (km)
acres	4047	square metres (m^2)
	.4047	*hectares (ha)
	.4047	square hectometre (hm^2)
	.004047	square kilometres (km^2)
square miles (mi^2)	2.590	square kilometres (km^2)
cubic feet (ft^3)	28.32	cubic decimetres (dm^3)
	.02832	cubic metres (m^3)
cfs-days (ft^3/s-day)	2447	cubic metres (m^3)
	2.447×10^{-3}	cubic hectometres (hm^3)
acre-feet (acre-ft)	1233	cubic metres (m^3)
	1.233×10^{-3}	cubic hectometres (hm^3)
	1.233×10^{-6}	cubic kilometres (km^3)
cubic feet per second (ft^3/s)	28.32	litres per second (l/s)
	28.32	cubic decimetres per second (dm^3/s)
	.02832	cubic metres per second (m^3/s)
tons (short)	.9072	tonnes (t)

*The unit hectare is approved for use with the International System (SI) for a limited time.

COLORADO RIVER MAIN STEM

09380000 COLORADO RIVER AT LEES FERRY, ARIZ.
(National stream-quality accounting network station)

LOCATION.--Lat 36°51'53", long 111°35'15", in NE¼SE¼ sec.13, T.40 N., R.7 E., Coconino County, in Navajo Indian Reservation, at gaging station at head of Marble Gorge at Lees Ferry, 0.8 mi (1.3 km) upstream from Paria River, 16 mi (26 km) downstream from Glen Canyon Dam, 28 mi (45 km) downstream from Utah-Arizona State line, and 61.5 mi (99.0 km) upstream from Little Colorado River.

DRAINAGE AREA.--107,900 mi^2 (279,500 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: January to July 1926, October 1926 to June 1927, October 1928 to September 1930, November 1942 to October 1945, October 1947 to current year.
Water temperatures: July 1949 to current year.
Sediment records: October 1928 to December 1933, November 1942 to September 1944, October 1947 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 975 micromhos Apr. 7; minimum daily, 695 micromhos Feb 5.
Water temperatures: Maximum, 10.0°C on several days during October; minimum, 7.0°C Feb. 7, 14, Mar. 5.

Period of record:
Specific conductance: Maximum daily, 1,260 micromhos Apr. 20, 21, 1967; minimum daily, 460 micromhos Aug. 10, 1965.
Water temperatures: Maximum, 21.0°C on several days during August, September, and October, 1965, 1967, 1968; minimum, 2.0°C Jan. 29, 30, 1970.

REMARKS.--Because of the regulation of flow by Glen Canyon Dam since Mar. 13, 1963, and the subsequent filling of Lake Powell, extreme values for the period of record include only those obtained after July 31, 1965.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT.									
01...	1700	10400	8.8	30	75	25	75	3.8	160
NOV.									
05...	0900	5270	7.9	0	71	25	75	4.0	162
DEC.									
01...	1500	5320	7.4	10	69	24	74	3.7	155
JAN.									
02...	1540	26800	7.9	60	64	23	65	3.5	149
FEB.									
04...	1045	6770	7.2	10	64	22	63	3.5	148
MAR.									
05...	1000	6040	8.1	110	74	26	78	4.1	165
15...	1240	8400	7.9	--	73	26	78	4.0	166
APR.									
01...	1445	10500	8.0	--	77	28	85	3.9	176
22...	1200	14000	11	--	78	28	85	3.6	175
MAY									
02...	1230	10500	8.2	20	75	28	78	3.7	171
28...	1120	18300	8.4	20	72	26	76	3.6	168
JUNE									
06...	1550	12100	8.5	20	75	26	76	3.6	167
24...	1400	20500	9.2	--	71	25	74	4.2	164
JULY									
29...	0915	22500	8.4	--	70	26	70	3.8	162
AUG.									
27...	1100	22900	8.2	--	70	24	66	3.9	161
SEP.									
27...	1145	16600	8.6	10	68	24	66	3.9	155

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09380000 COLORADO RIVER AT LEES FERRY, ARIZ.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 to SEPTEMBER 1974

DATE	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.									
01...	0	250	47	.3	.53	.04	170	578	566
NOV.									
05...	0	240	47	.2	.63	.01	80	579	553
DEC.									
01...	0	230	42	.2	.49	.02	90	548	529
JAN.									
02...	0	210	40	.3	.42	.02	70	509	489
FEB.									
04...	0	210	39	.2	.47	.03	90	493	484
MAR.									
05...	0	250	50	.4	.59	.00	90	599	575
15...	0	240	52	.2	.55	.00	100	586	565
APR.									
01...	0	270	58	.4	.69	.01	110	648	620
22...	0	260	58	.3	.65	.01	120	635	633
MAY									
02...	0	250	54	.3	.56	.01	110	611	584
28...	0	240	54	.3	.49	.01	90	599	565
JUNE									
06...	0	230	51	.2	.53	.00	100	577	555
24...	--	220	50	.3	.47	.01	90	573	537
JULY									
29...	--	220	49	.3	.51	.02	100	563	530
AUG.									
27...	--	200	46	.3	.48	.00	80	536	500
SEP.									
27...	--	200	44	.2	.47	.01	670	555	494

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)
OCT.									
01...	.78	290	160	1.9	891	7.9	10.0	--	--
NOV.									
05...	.79	280	150	2.0	898	8.1	9.5	--	--
DEC.									
01...	.75	270	140	2.0	837	8.2	9.0	--	--
JAN.									
02...	.69	250	130	1.8	788	8.2	8.5	--	--
FEB.									
04...	.67	250	130	1.7	772	8.0	7.5	--	--
MAR.									
05...	.81	290	160	2.0	906	8.0	7.0	--	--
15...	.80	290	150	2.0	920	7.9	8.0	1	--
APR.									
01...	.88	310	160	2.1	985	7.9	8.0	--	--
22...	.86	310	170	2.1	962	8.0	9.0	1	--
MAY									
02...	.83	300	160	2.0	925	8.0	9.0	--	--
28...	.81	290	150	2.0	908	8.0	9.0	0	--
JUNE									
06...	.78	290	160	1.9	900	8.2	9.0	--	--
24...	.78	285	150	1.9	860	7.6	8.0	1	8.0
JULY									
29...	.77	280	150	1.8	840	7.9	8.0	1	--
AUG.									
27...	.73	270	140	1.7	820	7.8	8.0	1	--
SEP.									
27...	.75	270	140	1.8	850	7.6	7.5	1	--

09380000 COLORADO RIVER AT LEES FERRY, ARIZ.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITROG-EN (N) (MG/L)	TOTAL ORTHO-PHOSPHATE (PO4) (MG/L)	TOTAL PHOSPH-ORUS (P) (MG/L)
MAR.								
19...	1240	.54	.01	.55	.24	.79	.09	.01
APR.								
24...	1200	.63	.01	.64	.29	.93	.01	.01
MAY								
28...	1120	.54	.01	.55	.34	.89	.09	.01
JUNE								
25...	1400	--	--	.50	.36	.86	.08	.00
JULY								
29...	0915	--	--	.52	.52	1.0	.06	.03
AUG.								
27...	1100	--	--	.51	.10	.89	.01	.01
SEP.								
27...	1145	--	--	.77	.31	1.1	.06	.02

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)
MAR.				
19...	1200	420	<1	<1
APR.				
24...	1200	290	<1	<1
MAY				
28...	1120	1200	3	3
JUNE				
25...	1545	7400	3	11
JULY				
29...	0915	440	6	5
AUG.				
27...	1100	1600	<1	<1
SEP.				
27...	1145	--	<1	2

09380000 COLORADO RIVER AT LEES FERRY, ARIZ.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
MAY												
28...	1120	19	6	2	10	0	0	1	<50	22	10	20
SEP.												
27...	1145	2	3	0	<10	0	0	1	<50	2	<10	10

DATE	TOTAL IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
MAY												
28...	150	5	<100	0	0	.0	.1	3	5	30	60	1.0
SEP.												
27...	100	2	<100	0	0	.2	.4	3	3	10	120	5.0

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	880	880	830	---	770	875	955	925	---	850	830	---
2	880	860	805	780	765	750	955	910	---	850	830	---
3	880	880	845	760	765	730	970	910	895	850	---	820
4	860	880	805	785	765	920	940	925	895	---	830	830
5	850	870	790	---	695	875	955	925	895	850	805	830
6	840	875	820	---	---	880	945	920	890	---	810	800
7	880	855	785	775	770	765	975	925	880	855	810	---
8	---	880	780	775	720	875	925	925	880	855	810	800
9	870	---	780	805	765	880	950	925	865	855	810	800
10	870	865	785	880	765	890	965	915	865	855	810	805
11	860	865	---	790	770	895	965	910	865	865	825	805
12	860	880	---	800	770	870	950	910	850	865	825	815
13	860	880	---	800	765	880	---	910	850	---	815	815
14	850	860	---	785	765	---	---	920	850	---	830	815
15	855	865	---	780	---	875	---	905	850	830	830	815
16	850	865	755	790	750	900	---	---	850	845	850	800
17	850	---	755	880	755	930	---	---	860	830	840	815
18	850	---	735	765	755	930	---	---	850	830	---	800
19	860	---	810	---	795	940	---	---	---	860	870	830
20	875	---	785	---	760	940	935	905	850	830	840	815
21	875	---	---	785	800	955	925	910	855	845	840	810
22	855	---	---	840	805	945	935	910	855	860	855	---
23	845	830	---	870	810	---	935	895	860	---	900	845
24	850	840	---	785	800	---	920	905	860	845	860	815
25	850	845	---	805	810	955	915	895	855	840	---	815
26	860	840	---	770	785	---	925	895	860	840	820	820
27	865	865	---	775	785	945	925	895	870	840	820	820
28	870	845	785	775	775	920	925	895	860	845	840	820
29	840	850	---	780	---	930	920	895	---	840	845	830
30	855	860	---	780	---	955	905	895	860	830	840	840
31	870	---	---	770	---	970	---	---	---	840	830	---
MEAN	855	---	---	787	771	895	---	910	864	846	833	816

YEAR MAX 975 MIN 695 MEAN 848

09380000 COLORADO RIVER AT LEES FERRY, ARIZ.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	9.5	9.0	---	7.5	8.0	8.0	9.0	---	8.0	8.0	---
2	10.0	9.5	9.0	9.0	7.5	8.0	8.0	9.0	---	8.5	8.0	---
3	10.0	9.5	9.0	9.0	7.5	8.0	8.0	8.0	9.0	8.0	---	7.5
4	10.0	9.5	9.5	8.5	7.5	8.0	8.0	9.0	8.5	---	8.0	8.0
5	10.0	9.5	9.5	---	7.5	7.0	8.0	9.0	8.0	8.0	7.5	7.5
6	10.0	9.5	9.5	---	---	7.5	8.0	8.5	8.5	---	8.0	8.0
7	9.5	9.5	9.5	8.5	7.0	8.0	8.0	9.0	8.0	8.0	8.0	---
8	---	9.5	9.5	9.0	7.5	7.5	8.0	9.0	8.0	8.0	8.0	8.0
9	8.0	---	9.5	9.0	7.5	7.5	8.0	9.0	8.0	8.0	8.0	8.0
10	10.0	9.5	9.5	9.0	7.5	7.5	8.0	9.0	8.5	8.5	7.5	8.0
11	8.0	9.0	---	8.5	7.5	8.0	8.0	8.5	8.5	8.5	8.0	8.0
12	9.0	9.0	---	8.5	7.5	8.0	8.0	8.5	8.5	8.0	8.0	7.5
13	8.5	9.0	---	8.5	7.5	7.5	---	8.5	8.0	---	8.0	8.0
14	9.0	9.0	---	8.0	7.0	---	---	8.0	8.5	---	8.0	8.0
15	8.0	9.0	---	8.5	---	8.0	---	9.0	8.0	8.5	8.0	8.0
16	10.0	8.5	9.5	8.5	7.5	8.0	---	---	8.5	8.5	8.0	8.0
17	10.0	---	9.5	8.5	7.5	8.0	---	---	8.5	8.0	8.0	8.0
18	9.5	---	9.5	9.0	7.5	8.0	---	---	8.0	8.0	---	8.0
19	10.0	---	9.5	---	7.5	9.0	---	---	---	8.0	8.0	8.0
20	10.0	---	9.0	---	7.5	9.0	9.0	9.0	8.5	8.0	8.0	8.0
21	10.0	---	---	8.0	8.0	9.0	9.0	9.0	8.5	8.5	8.0	7.5
22	10.0	---	---	8.0	8.0	10.0	9.0	8.5	8.5	8.0	7.5	---
23	10.0	8.0	---	8.0	7.5	---	9.0	9.0	8.5	---	8.0	7.5
24	10.0	8.5	---	8.0	7.5	---	9.0	9.0	8.5	8.0	7.5	7.5
25	9.5	9.0	---	8.0	7.5	9.0	9.5	9.0	8.5	8.0	---	7.5
26	9.5	9.5	---	8.0	8.0	---	9.0	8.5	8.5	8.0	7.5	7.5
27	9.5	9.0	---	8.5	7.5	9.0	9.5	9.0	8.5	8.0	8.0	7.5
28	9.0	9.0	9.0	8.0	8.0	9.0	9.5	9.0	8.5	8.0	8.0	7.5
29	9.0	9.0	---	8.0	---	9.0	9.0	9.0	---	8.0	8.0	7.5
30	9.5	9.0	---	8.0	---	9.0	9.5	9.0	8.5	8.0	8.0	8.0
31	9.5	---	---	8.0	---	8.0	---	---	---	8.0	8.0	---
MEAN	9.5	---	---	8.5	7.5	8.0	---	9.0	8.5	8.0	8.0	8.0

YEAR MAX 10.0 MIN 7.0 MEAN 8.5

09380000 COLORADO RIVER AT LEES FERRY, ARIZ.--Continued

PERIODIC DAILY SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT.			
01...	7070	9	172
10...	9680	1	26
23...	10100	6	218
NOV.			
01...	8700	53	1240
13...	5620	53	804
DEC.			
02...	2910	63	495
20...	4480	35	423
JAN.			
02...	18500	245	12200
12...	18600	22	1100
27...	2590	3	21
FEB.			
02...	3520	653	6210
10...	1610	4	17
MAR.			
03...	2200	5	30
12...	6150	8	133
APR.			
01...	6810	87	1600
21...	6850	44	814
MAY			
01...	8970	10	242
10...	16400	24	1060
21...	12300	10	332
JUNE			
05...	11800	11	350
20...	18600	19	954
JULY			
01...	18800	8	406
11...	20100	18	977
AUG.			
01...	20700	706	39500
22...	20200	41	22400
SEP.			
06...	10600	3	87
20...	15900	3	129

09382000 PARIA RIVER AT LEES FERRY, ARIZ.

LOCATION.--Lat 36°52'20", long 111°35'38", in NW¼NE¼ sec.13, T.40 N., R.7 E., Coconino County, at gaging station 0.6 mi (1.0 km) northwest of Lees Ferry, and 1.1 mi (1.8 km) upstream from mouth.

DRAINAGE AREA.--1,410 mi^2 (3,652 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1947 to February 1950, October 1969 to September 1972.
Specific conductance: October 1964 to current year.
Water temperatures: October 1956 to current year.
Sediment records: October 1947 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 3,500 micromhos Aug. 1; minimum daily, 460 micromhos July 10.
Water temperatures: Maximum, 32.0°C June 22, 25; minimum, freezing point Dec. 20, Jan 2, 3, 4.
Sediment concentrations: Maximum daily, 201,000 mg/l Sept, 6; minimum daily, 5 mg/l July 2.
Sediment discharge: Maximum daily, 70,200 tons (63,700 tonnes) Aug. 3; minimum daily, 0.04 ton (0.04 tonnes) July 2.

Period of record:
Specific conductance: Maximum daily, 4,750 micromhos July 19, 1971; minimum daily, 320 micromhos May 21, 1967.
Water temperatures (1956-61, 1965-74): Maximum, 38.0°C June 18, 1972; minimum, freezing point on many days during winter months.
Sediment concentrations: Maximum daily, 780,000 mg/l Aug. 9, 1968, Oct. 20, 1972; minimum daily, 1 mg/l June 1-10, 1950.
Sediment discharge: Maximum daily, 5,100,000 tons (4,630,000 tonnes) Sept. 12, 1958; minimum daily, 0 ton (0 tonne) on many days of most years.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	790	910	1330	---	1390	1350	1120	610	---	510	3500	---
2	750	1190	1380	620	1450	1380	1180	610	---	500	2300	---
3	910	1350	1450	620	1380	1420	1200	590	490	500	---	550
4	890	1390	1250	620	1400	1430	1470	580	510	---	2500	560
5	900	1200	1300	---	---	1400	1400	550	500	500	2100	550
6	910	1250	1400	---	---	1420	1450	550	560	---	1780	2800
7	900	1420	1420	1120	1470	1500	1420	550	560	890	---	---
8	---	1390	1200	1140	1450	1300	1200	540	520	540	1500	2200
9	850	---	1200	820	1220	1240	950	530	500	470	1300	1600
10	850	1410	1320	1320	1190	1260	1200	530	590	460	1090	1400
11	840	1400	---	1400	1210	1270	1220	550	520	490	1060	1350
12	830	1390	---	1300	1450	1390	1220	580	550	480	1610	720
13	990	1500	---	1400	1420	1380	---	580	550	---	1640	650
14	910	1600	---	1310	1420	---	---	590	590	---	1170	---
15	---	1750	---	1300	---	1250	---	540	560	500	1170	---
16	---	1600	1200	1350	1210	1250	---	---	580	510	---	800
17	890	---	1200	1350	1350	1250	---	---	600	2300	710	2800
18	---	---	1220	1270	1370	1250	---	---	600	1430	---	2600
19	---	---	1250	---	1380	1220	---	---	---	1300	690	2600
20	880	---	1370	---	1410	1200	1020	500	520	---	580	1900
21	880	---	---	1350	1420	1150	1040	500	540	1620	560	1650
22	810	---	---	1350	1300	1150	1020	500	540	1600	540	---
23	810	1400	---	1350	1330	---	1020	510	540	---	530	1200
24	850	1500	---	1000	---	---	900	500	560	2900	530	1070
25	860	1550	---	950	1410	1100	890	510	580	2300	---	1100
26	860	1400	---	1190	1250	---	810	500	600	3300	540	1100
27	900	1800	---	1200	1400	1190	820	500	600	2500	520	1000
28	900	1900	1200	1430	1410	950	730	490	610	2300	550	1000
29	910	1800	---	1460	---	1180	750	510	---	1590	560	900
30	950	1850	---	1420	---	1200	670	500	550	1600	530	1000
31	950	---	---	1420	---	---	---	---	---	2900	540	---
MEAN	876	---	---	1190	1360	1270	---	538	551	1360	1160	1380

YEAR MAX 3500 MIN 460 MEAN 1110

09382000 PARIA RIVER AT LEES FERRY, ARIZ.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.5	17.5	5.5	---	4.5	6.0	24.0	27.0	---	29.0	27.0	---
2	25.0	15.0	5.5	0.0	5.5	6.0	20.0	26.0	---	29.0	25.5	---
3	24.0	14.0	5.5	0.0	4.0	7.0	14.0	27.0	31.0	31.0	---	32.0
4	26.0	10.0	5.0	0.0	2.5	9.0	10.0	26.0	31.0	---	27.0	30.0
5	25.0	7.5	5.0	---	---	6.0	12.0	25.5	29.0	30.0	27.0	30.0
6	23.0	12.5	3.0	---	---	9.0	14.5	26.0	30.0	---	24.0	20.0
7	22.0	15.0	1.0	1.0	2.5	10.0	15.0	26.0	25.0	30.0	---	---
8	---	14.5	1.0	3.0	4.0	7.0	17.0	25.0	28.0	29.0	30.0	21.0
9	19.5	---	3.0	5.5	5.0	8.0	18.0	27.0	30.0	29.0	31.0	30.0
10	16.0	14.5	2.0	5.0	5.0	13.0	20.0	27.0	30.0	30.0	22.0	26.0
11	17.0	10.0	---	5.0	3.0	15.0	21.0	30.0	29.0	29.0	22.5	30.0
12	17.0	9.0	---	6.0	3.0	17.0	15.0	30.0	30.0	29.0	27.0	28.0
13	19.0	10.0	---	8.5	2.0	12.0	---	30.0	30.0	---	28.0	26.0
14	17.5	9.0	---	6.0	1.5	---	---	30.0	30.0	---	28.0	---
15	---	7.0	---	5.0	---	19.0	---	30.0	28.0	30.0	28.0	---
16	---	6.0	5.5	5.0	2.0	15.0	---	---	27.0	30.0	---	20.0
17	19.5	---	5.0	8.0	5.0	15.0	---	---	29.0	27.5	28.0	22.0
18	---	---	7.0	8.0	7.0	16.0	---	---	27.0	22.5	---	15.0
19	---	---	6.0	---	7.0	14.0	---	---	---	21.5	26.0	24.0
20	19.0	---	0.0	---	8.5	14.5	24.0	30.0	26.0	---	27.0	24.0
21	19.0	---	---	7.0	7.0	15.0	25.0	30.0	30.0	29.0	27.0	18.0
22	18.0	---	---	5.0	4.0	15.0	26.0	31.0	32.0	26.0	24.0	---
23	18.0	8.0	---	5.0	4.0	---	27.0	31.0	31.0	---	28.0	25.5
24	18.5	6.0	---	3.0	---	---	24.0	30.0	31.0	22.0	27.0	26.0
25	15.0	6.0	---	3.0	5.0	23.0	24.0	30.0	32.0	22.0	---	16.0
26	18.0	6.0	---	5.0	9.0	---	24.0	30.0	30.0	24.0	27.0	18.0
27	---	6.0	---	6.0	8.0	20.0	26.0	30.0	31.0	27.0	28.0	25.0
28	18.0	6.0	6.0	5.0	8.0	19.0	22.0	31.0	31.0	28.0	30.0	22.0
29	15.5	6.5	---	4.0	---	23.0	22.0	31.0	---	26.0	30.0	26.0
30	15.0	6.5	---	3.0	---	23.0	23.0	31.0	30.0	27.0	30.0	26.0
31	17.0	---	---	3.0	---	---	---	---	---	27.0	30.0	---
MEAN	19.5	---	---	4.5	5.0	13.5	---	29.0	29.5	27.5	27.5	24.0

YEAR MAX 32.0 MIN 0.0 MEAN 18.5

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.5	53	.79	8.8	84	2.0	28	1330	100
2	6.8	38	.55	11	92	2.7	28	1100	83
3	6.0	52	.84	11	98	2.7	27	1060	77
4	5.8	23	.36	12	98	2.9	18	1270	62
5	5.8	23	.36	12	84	2.7	18	1030	50
6	6.2	62	1.0	13	77	2.7	21	970	55
7	5.8	67	1.0	13	98	3.4	21	910	52
8	6.2	66	1.1	14	68	2.6	20	1170	63
9	6.5	65	1.1	14	75	2.8	22	630	37
10	7.0	57	1.1	15	89	3.6	21	550	31
11	7.4	27	.54	14	84	3.2	20	500	27
12	7.4	60	1.2	15	82	3.3	20	450	24
13	7.8	65	1.4	15	79	3.2	23	450	28
14	7.8	90	1.9	14	86	3.3	29	700	55
15	8.2	95	2.1	13	88	3.1	23	450	28
16	7.8	95	2.0	14	90	3.4	20	420	23
17	7.4	98	2.0	14	90	3.4	19	460	24
18	7.8	95	2.0	16	100	4.3	22	460	27
19	8.2	98	2.0	16	100	4.3	23	490	30
20	8.2	90	2.0	20	300	16	19	480	25
21	8.2	91	2.0	16	100	4.3	18	480	23
22	8.2	117	2.6	21	460	26	13	480	14
23	8.6	131	3.0	21	530	30	19	480	21
24	8.2	124	2.7	20	540	29	23	500	31
25	8.2	111	2.5	21	590	33	21	450	26
26	8.2	160	3.5	24	610	40	18	350	17
27	8.2	166	3.7	19	1150	59	18	300	15
28	8.6	161	3.7	20	1530	83	17	260	12
29	8.6	128	3.0	18	1700	83	34	600	55
30	8.6	39	.91	25	2030	137	27	500	36
31	8.6	42	.98	--	--	--	27	450	33
TOTAL	231.8	--	53.93	479.8	--	599.9	677	--	1184

PARIA RIVER BASIN

09382000 PARIA RIVER AT LEES FERRY, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	16	400	17	23	1170	76	32	6600	570
2	11	404	12	32	1680	160	40	10100	1090
3	6.0	408	6.6	33	1900	174	68	10600	1950
4	8.0	426	9.2	32	1860	166	46	9500	1180
5	8.0	400	8.6	31	1880	162	26	8100	569
6	10	400	11	24	1780	118	24	3800	246
7	11	440	13	22	1500	93	25	1700	115
8	12	300	9.7	15	1060	45	24	1950	126
9	18	970	47	16	665	30	24	1900	123
10	33	1630	153	18	1370	75	28	1070	81
11	29	1140	90	23	1080	69	28	1040	79
12	19	830	42	27	1450	114	24	940	61
13	22	840	50	30	1760	146	24	1140	74
14	26	700	49	30	1720	143	23	1660	103
15	30	620	50	28	1680	133	23	2300	143
16	30	670	54	28	1830	137	23	3040	189
17	30	550	45	32	1900	165	23	3230	201
18	32	610	53	32	1900	164	23	2900	180
19	33	680	61	24	974	64	20	1530	83
20	37	670	67	27	900	66	18	1320	64
21	31	670	56	24	880	57	16	1040	45
22	31	1750	161	20	790	43	15	990	40
23	16	2710	117	23	790	49	14	900	34
24	18	1390	66	21	905	51	13	790	28
25	16	1040	45	20	1010	55	13	410	14
26	18	650	32	21	1280	73	12	320	10
27	18	520	25	26	1250	88	13	490	17
28	20	1120	67	26	1790	126	16	340	15
29	31	1800	160	--	--	--	15	160	6.5
30	27	1300	93	--	--	--	13	170	6.0
31	26	1060	74	--	--	--	13	160	5.6
TOTAL	673.0	--	1746.1	708	--	2842	719	--	7448.1

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	12	162	5.2	4.5	13	.16	4.2	7	.08
2	14	368	14	4.5	10	.12	4.2	7	.08
3	24	1670	129	4.5	14	.17	4.0	8	.09
4	16	2020	87	4.8	17	.22	3.9	10	.11
5	13	470	16	5.0	12	.16	3.6	7	.07
6	11	368	11	5.0	14	.19	3.4	8	.07
7	8.6	339	7.9	5.0	16	.22	3.6	9	.09
8	7.4	290	5.8	4.8	20	.26	3.4	12	.11
9	9.8	353	9.3	4.5	12	.15	3.9	12	.13
10	10	150	4.0	4.2	11	.12	3.9	11	.12
11	9.4	185	4.7	4.2	10	.11	3.9	14	.15
12	9.8	258	6.8	4.2	10	.11	3.9	13	.14
13	7.4	250	5.0	4.2	10	.11	3.8	15	.15
14	6.8	200	3.7	4.2	8	.09	3.8	10	.10
15	7.8	150	3.2	4.4	13	.15	3.8	12	.12
16	7.0	100	1.9	4.0	12	.13	3.8	11	.11
17	7.4	50	1.0	4.2	11	.12	3.6	10	.10
18	7.4	40	.80	4.2	10	.11	3.8	9	.09
19	8.2	30	.66	4.4	9	.11	3.4	9	.08
20	7.4	18	.36	4.4	8	.10	3.4	10	.09
21	7.0	37	.70	4.5	9	.11	3.2	10	.09
22	6.9	28	.51	4.4	10	.12	3.3	10	.09
23	6.0	33	.53	4.4	8	.10	3.3	9	.08
24	5.5	21	.31	4.4	8	.10	3.2	9	.08
25	5.8	11	.17	4.4	10	.12	3.2	10	.09
26	5.0	14	.19	4.4	9	.11	3.0	9	.07
27	5.0	14	.19	4.4	8	.10	3.0	6	.05
28	5.0	11	.15	4.2	8	.09	3.0	9	.07
29	4.8	11	.14	4.0	6	.06	3.0	8	.06
30	4.5	10	.12	3.9	6	.06	3.2	6	.05
31	--	--	--	4.0	6	.06	--	--	--
TOTAL	259.8	--	320.33	136.2	--	3.94	106.7	--	2.81

09382000 PARIA RIVER AT LEES FERRY, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.3	8	.05	56	125000	20100	4.5	100	1.2
2	3.0	5	.04	61	65700	10100	4.5	50	.61
3	3.3	6	.05	124	159000	70200	4.8	12	.16
4	3.4	7	.06	34	168000	15400	5.5	15	.22
5	3.4	8	.07	16	112000	4840	5.5	25	.37
6	3.4	9	.08	16	62000	2680	80	201000	62600
7	3.4	10	.09	16	26000	1120	28	94000	7110
8	3.6	11	.11	13	4750	167	10	47000	1270
9	3.3	8	.07	14	2900	110	8.2	22000	487
10	3.3	7	.06	16	4600	199	7.4	2000	40
11	3.3	7	.06	13	7800	274	5.8	1220	19
12	3.3	7	.06	9.4	17500	444	6.0	550	8.9
13	3.3	8	.07	7.4	18000	360	6.2	304	5.1
14	3.3	8	.07	6.5	3700	65	6.5	250	4.4
15	3.4	9	.08	5.8	935	15	5.8	200	3.1
16	5.3	5380	290	5.5	585	8.7	10	13400	937
17	68	61800	14300	5.5	185	2.7	16	51500	2220
18	16	23000	994	5.8	130	2.0	24	49900	3600
19	12	14700	1590	5.2	130	1.8	15	57500	2330
20	41	20000	3320	5.2	92	1.3	10	23000	621
21	15	14500	749	5.0	91	1.2	7.4	8000	160
22	28	26000	1970	5.0	78	1.1	7.0	450	8.5
23	156	84500	45800	5.2	72	1.0	7.0	431	8.1
24	74	112000	23300	5.0	73	.99	7.4	335	6.7
25	26	61000	4280	5.0	75	1.0	6.8	403	7.4
26	15	100000	4050	5.0	78	1.1	7.8	344	7.2
27	12	66200	2140	5.0	67	.90	6.5	332	5.8
28	13	45500	1600	4.8	86	1.1	6.2	313	5.2
29	9.8	6650	176	4.8	171	2.2	6.0	313	5.1
30	6.2	1300	22	4.5	112	1.4	6.0	290	4.7
31	44	82100	17900	4.5	141	1.7	--	--	--
TOTAL	592.3	--	122482.02	489.1	--	126104.19	331.8	--	81476.76

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 5404.5
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 344264.08

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ANALYSES MADE IN DISTILLED WATER)

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
AUG. 01...	1100	104	27.0	204000	57300	40	49	73	93	98	100

LITTLE COLORADO RIVER BASIN

09401260 MOENKOPI WASH AT MOENKOPI, ARIZ.

LOCATION.--Lat 36°06'18", long 111°12'04", in NW¼ sec.3, T.31 N., R.11 E. (unsurveyed), Coconino County, in Navajo Indian Reservation at highway bridge on State Highway 264, 2.5 mi (4.0 km) downstream from gaging station 09401250, 1.3 mi (2.1 km) southeast of Moenkopi, 12.5 mi (20.1 km) downstream from Begashibito Wash.

DRAINAGE AREA.--1,650 mi^2 (4,270 km^2), approximately, at gaging station.

PERIOD OF RECORD.--Specific conductance: October 1973 to current year.
Water temperature: October 1973 to current year.
Sediment records: October 1973 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 4,000 micromhos Aug. 6, Sept. 6; minimum daily, 850 micromhos Dec. 13, 14.
Water temperatures: Maximum, 31.0°C May 8; minimum, freezing point on many days in December and January.
Sediment concentrations: Maximum daily, 189,000 mg/l July 21; minimum daily, no flow on many days.
Sediment discharge: Maximum daily, 152,000 tons (138,000 tonnes) July 19; minimum daily, 0 ton (0 tonne) on many days.

REMARKS.--Sediment loads are computed using discharge at sta 09401250. No appreciable inflow between gaging station and sampling site.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1000	990	1010	920	1800	1090	1000	---	---	3200	---
2	---	1400	990	1180	980	3000	1440	1100	---	---	3600	---
3	960	1000	900	1200	950	3000	1250	1110	---	---	3600	---
4	---	1000	900	1250	950	2500	1220	1160	---	---	2600	---
5	1080	1010	---	1320	950	2500	1200	1150	---	---	3500	---
6	---	1030	---	1200	950	2000	1050	1100	---	---	4000	4000
7	---	1050	1000	1090	950	1900	1020	1100	---	---	2900	3500
8	---	1000	920	1050	980	1600	1000	1100	---	---	2200	3500
9	---	990	890	1190	1000	1400	1470	1080	---	---	2300	3200
10	---	990	900	1200	1000	1280	1600	1120	---	---	2300	3000
11	1070	950	980	1200	910	1220	1400	1160	---	---	2500	3000
12	1000	950	985	1200	910	1200	1350	2200	---	---	2500	3500
13	1100	1000	850	1050	960	1450	1250	1580	---	---	2500	---
14	1000	1000	850	1050	990	1190	1180	1750	---	---	2900	---
15	1000	1000	860	1020	1000	1120	1050	1750	---	---	---	---
16	1000	1000	860	1000	1000	1150	1000	2200	---	---	---	---
17	990	1010	900	1020	1000	1120	990	2200	---	---	---	---
18	990	1000	880	1020	1010	1120	1000	1900	---	---	---	---
19	980	2200	950	1020	1000	1100	1100	1900	---	3780	---	1430
20	980	1600	1070	1050	1000	1100	1100	3900	---	3170	---	2600
21	980	1100	1120	1110	980	1100	1100	4000	---	2830	---	2900
22	980	1190	1150	1120	980	1100	1100	2990	---	2210	---	2300
23	1150	1070	1100	1100	950	1100	1000	2100	---	2080	---	---
24	1220	1030	1050	1150	950	1100	1020	1650	---	2600	---	2080
25	1150	1110	1050	1150	950	1070	1020	1400	---	2500	---	1480
26	1050	1100	1000	1030	950	1070	1200	1450	---	---	---	1350
27	1000	1100	1050	1150	950	1000	1350	1470	---	2220	---	1180
28	950	1120	980	1150	900	1050	1220	1550	---	2250	---	1200
29	920	1180	990	1150	---	1000	1170	---	---	2200	---	1200
30	1300	1050	900	1150	---	1350	1100	---	---	2900	---	1060
31	1100	---	1000	950	---	1350	---	---	---	3200	---	---
MEAN	---	1100	965	1110	965	1450	1170	1720	---	---	---	---
YEAR	MAX	4000	MIN	850	MEAN	1420						

09401260 MOENKOPI WASH AT MOENKOPI, ARIZ.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.0	5.0	0.0	---	---	12.0	27.0	---	---	22.0	---
2	---	14.0	4.0	0.0	---	---	15.0	22.0	---	---	21.0	---
3	11.0	10.0	4.0	0.0	---	---	14.0	26.0	---	---	25.0	---
4	---	11.0	3.0	0.0	---	---	14.0	29.0	---	---	21.0	---
5	---	3.5	---	0.0	---	---	16.0	29.0	---	---	22.5	---
6	---	3.5	---	0.0	---	---	19.0	18.5	---	---	20.0	24.0
7	---	15.0	7.0	0.0	---	---	11.0	30.0	---	---	18.0	18.0
8	---	15.0	2.0	0.0	---	---	8.0	31.0	---	---	19.0	21.0
9	---	14.0	8.0	0.0	---	---	9.0	14.0	---	---	18.0	25.0
10	---	15.0	1.0	1.0	---	---	11.0	12.0	---	---	19.0	25.0
11	19.5	15.0	2.0	1.0	---	17.0	11.0	13.0	---	---	18.0	22.0
12	11.0	13.0	4.0	2.0	---	---	15.0	17.0	---	---	16.0	13.0
13	15.0	---	4.0	0.0	---	---	5.0	12.0	---	---	17.0	---
14	15.0	---	5.0	---	---	10.0	9.0	14.0	---	---	16.0	---
15	14.0	---	1.0	---	---	13.0	18.0	14.0	---	---	---	---
16	18.0	---	1.0	---	---	13.0	19.0	12.0	---	---	---	---
17	18.0	---	4.0	---	---	14.0	9.0	19.0	---	---	---	---
18	12.0	---	4.0	---	---	9.0	---	16.0	---	---	---	---
19	17.0	---	0.0	---	---	10.0	14.0	16.0	---	22.0	---	22.0
20	18.0	---	0.0	---	9.5	13.0	7.0	14.0	---	25.0	---	24.0
21	8.0	2.0	0.0	---	---	19.0	19.0	---	---	23.0	---	20.0
22	10.0	3.0	0.0	---	---	14.5	11.0	13.0	---	26.0	---	19.0
23	14.0	8.0	0.0	---	---	9.0	14.0	15.0	---	26.0	---	---
24	17.0	8.0	0.0	---	---	20.0	14.0	11.0	---	20.0	---	18.0
25	18.0	4.0	0.0	---	---	19.0	12.0	12.0	---	22.0	---	15.0
26	13.0	4.0	0.0	---	---	10.0	20.0	20.0	---	---	---	13.0
27	10.0	3.0	0.0	---	---	20.0	13.0	19.0	---	29.5	---	17.0
28	12.0	3.0	0.0	---	---	16.0	21.0	18.0	---	22.0	---	7.0
29	11.0	4.0	0.0	---	---	21.0	25.0	---	---	26.0	---	8.0
30	13.0	4.0	4.0	---	---	16.0	16.0	---	---	25.0	---	4.0
31	15.0	---	0.0	---	---	16.0	---	---	---	21.0	---	---
MEAN	---	---	2.0	---	---	---	14.0	18.5	---	---	---	---
YEAR	MAX	31.0	MIN	0.0	MEAN	13.0						

09401260 MOENKOPI WASH AT MOENKOPI, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.0	408	1.1	1.8	363	1.8	2.7	1330	9.7
2	.90	390	.95	1.8	744	3.6	3.0	1370	11
3	.80	364	.79	1.6	288	1.2	2.7	581	4.2
4	.70	400	.76	1.6	315	1.4	2.8	856	6.5
5	.70	599	1.1	1.5	536	2.2	2.7	850	6.2
6	.70	608	1.1	1.5	934	3.8	1.9	825	4.2
7	.80	600	1.3	1.5	295	1.2	2.0	811	4.4
8	.90	603	1.5	1.5	286	1.2	2.5	1440	9.7
9	1.0	600	1.6	1.4	197	.74	2.7	918	6.7
10	1.1	600	1.8	1.4	294	1.1	2.4	1190	7.7
11	1.2	588	1.9	1.5	623	2.5	2.7	889	6.5
12	1.2	370	1.2	1.5	273	1.1	2.5	822	5.5
13	1.1	133	.40	1.5	263	1.1	2.4	1040	6.7
14	1.0	292	.79	1.3	257	.90	2.5	1060	7.2
15	1.0	251	.68	1.2	255	.83	1.5	628	2.5
16	.90	251	.61	1.3	773	2.7	1.6	794	3.4
17	.90	278	.68	1.3	445	1.6	1.9	957	4.9
18	1.0	283	.76	1.3	336	1.2	2.2	928	5.5
19	1.1	263	.78	2.2	1320	7.8	2.0	971	5.2
20	1.2	245	.79	2.2	1740	10	1.1	554	1.6
21	1.3	244	.86	2.0	1040	5.6	1.1	453	1.3
22	1.4	230	.87	1.9	504	2.6	1.6	447	1.9
23	1.4	237	.90	2.7	547	4.0	2.0	623	3.4
24	1.4	228	.86	2.0	1320	7.1	1.5	778	3.2
25	1.3	235	.82	1.9	730	3.7	1.6	450	1.9
26	1.4	278	1.1	1.9	654	3.4	1.5	422	1.7
27	1.4	304	1.1	1.4	544	2.1	1.8	473	2.3
28	1.4	623	2.4	1.3	722	2.5	2.4	967	6.3
29	1.4	283	1.1	1.4	445	1.7	3.5	966	9.1
30	1.8	366	1.8	2.0	1010	5.4	3.9	1850	19
31	1.8	496	2.4	--	--	--	.86	790	1.8
TOTAL	35.20	--	34.80	49.4	--	86.07	67.56	--	171.2

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.3	256	.98	3.0	846	6.9	16	30700	2260
2	1.8	482	2.3	3.0	936	7.6	53	81900	12300
3	2.4	506	3.3	2.3	962	6.0	54	58300	7900
4	3.7	518	5.2	2.8	749	5.7	24	25400	1650
5	3.0	363	2.9	3.0	821	6.6	6.9	18000	335
6	2.8	394	3.0	2.3	660	4.3	3.9	5700	60
7	3.9	960	10	2.3	660	4.1	2.2	3420	20
8	3.0	966	7.8	2.4	749	4.8	1.9	1410	7.2
9	3.0	1740	14	2.7	1130	8.2	2.2	1410	8.4
10	3.0	1840	15	3.2	1110	9.6	2.8	1420	11
11	3.0	1820	15	3.7	1900	19	2.7	1860	14
12	3.0	1800	15	3.7	1430	14	2.8	1450	11
13	3.9	823	8.7	3.0	996	8.1	2.8	1310	9.9
14	3.5	820	7.7	3.0	981	7.9	2.8	1260	9.5
15	3.5	863	8.2	3.9	1070	11	2.7	926	6.8
16	3.7	787	7.9	3.9	966	10	2.4	750	4.9
17	4.1	913	10	3.2	770	6.7	2.0	696	3.8
18	3.9	897	9.4	4.1	751	8.3	1.9	554	2.8
19	3.9	902	9.5	3.9	786	8.3	1.8	476	2.3
20	4.1	972	11	2.8	706	5.3	2.0	538	2.9
21	3.7	803	8.0	2.7	571	4.2	2.0	489	2.6
22	2.7	885	6.5	3.5	567	5.4	1.8	548	2.7
23	2.4	775	5.0	2.7	542	4.0	1.8	413	2.0
24	2.4	810	5.2	2.0	719	3.9	1.8	413	2.0
25	3.0	880	7.1	2.2	691	4.1	1.8	360	1.7
26	3.0	1220	9.9	2.8	452	3.4	1.8	378	1.8
27	3.0	858	6.9	2.7	664	4.8	1.8	316	1.5
28	3.0	749	6.1	2.4	460	3.0	1.8	453	2.2
29	2.8	1020	7.7	--	--	--	1.8	382	1.9
30	2.1	953	5.4	--	--	--	1.6	449	1.9
31	3.0	1900	15	--	--	--	1.4	311	1.2
TOTAL	95.6	--	249.60	83.3	--	195.2	210.2	--	24641.0

09401260 MOENKOPI WASH AT MOENKOPI, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.4	398	1.5	1.3	226	.79	--	--	--
2	2.2	1150	6.8	1.3	174	.61	--	--	--
3	2.5	1460	9.9	1.1	172	.51	--	--	--
4	2.0	540	2.9	.94	189	.48	--	--	--
5	1.6	394	1.7	.94	225	.57	--	--	--
6	1.8	423	2.1	.94	229	.58	--	--	--
7	1.6	361	1.6	.86	185	.43	--	--	--
8	1.4	337	1.3	.94	186	.47	--	--	--
9	1.4	966	3.7	.86	198.	.46	--	--	--
10	1.3	494	1.7	.61	182	.30	--	--	--
11	1.4	370	1.4	.57	164	.25	--	--	--
12	1.4	802	3.0	.53	317	.45	--	--	--
13	1.3	386	1.4	.44	178	.21	--	--	--
14	1.3	340	1.2	.27	218	.16	--	--	--
15	1.4	620	2.3	.23	219	.14	--	--	--
16	1.5	340	1.4	.12	314	.10	--	--	--
17	1.6	296	1.3	.07	310	.06	--	--	--
18	1.8	308	1.5	.25	299	.20	--	--	--
19	1.6	294	1.3	.40	279	.30	--	--	--
20	1.4	275	1.0	.27	511	.37	--	--	--
21	1.4	253	.96	.31	472	.40	--	--	--
22	1.5	271	1.1	.53	403	.58	--	--	--
23	1.5	250	1.0	.57	262	.40	--	--	--
24	1.4	256	.97	.61	222	.37	--	--	--
25	1.5	247	1.0	.53	167	.24	--	--	--
26	1.5	317	1.3	.40	195	.21	--	--	--
27	1.3	326	1.1	.31	177	.15	--	--	--
28	1.3	218	.77	.17	162	.07	--	--	--
29	1.3	197	.69	0	0	0	--	--	--
30	1.3	194	.68	0	0	0	--	--	--
31	--	--	--	0	0	0	--	--	--
TOTAL	45.9	--	58.57	16.37	--	9.86	0	--	0

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	.07	34	.01	.17	25	.01
2	0	0	0	.05	31	0	.17	25	.01
3	0	0	0	8.5	40300	3150	.15	20	.01
4	0	0	0	16	91000	4850	.07	10	0
5	0	0	0	22	114000	7210	.17	25	.01
6	0	0	0	4.3	54000	627	10	70800	2860
7	0	0	0	2.3	33000	205	1.5	37500	152
8	0	0	0	1.2	3500	11	.70	858	1.6
9	0	0	0	.57	565	.87	.50	472	.64
10	0	0	0	.27	351	.26	.40	399	.43
11	0	0	0	.19	43	.02	.20	433	.23
12	0	0	0	.21	28	.02	.10	410	.11
13	0	0	0	.04	24	0	0	0	0
14	0	0	0	.01	21	0	.20	450	.24
15	0	0	0	.04	20	0	.40	450	.49
16	0	0	0	.15	40	.02	1.1	450	1.3
17	0	0	0	.11	20	.01	1.2	575	1.9
18	0	0	0	.07	10	0	2.0	700	3.8
19	240	131000	152000	.05	10	0	1.2	576	1.9
20	35	85000	8030	.11	20	.01	6.5	52600	1160
21	30	189000	15300	.02	10	0	4.1	33500	371
22	26	66000	4630	0	0	0	3.9	6320	67
23	23	65000	4040	.05	10	0	9.0	39000	948
24	18	85000	4130	.13	20	.01	3.0	23000	186
25	2.7	55000	401	.13	20	.01	1.8	2580	13
26	.94	31000	79	.17	25	.01	1.4	1580	6.0
27	.40	4080	4.4	.09	10	0	1.4	1020	3.9
28	.25	330	.22	.13	20	.01	1.2	741	2.4
29	1.2	307	.99	.13	20	.01	1.3	526	1.8
30	.40	400	.43	.15	25	.01	1.4	697	2.6
31	.17	419	.19	.19	30	.02	--	--	--
TOTAL	378.06	--	188616.23	57.43	--	16054.30	55.23	--	5786.38

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 1094.25
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 235903.21

09402500 COLORADO RIVER NEAR GRAND CANYON, ARIZ.

LOCATION.--Lat 36°06'05", long 112°05'08", in sec.5, T.31 N., R.3 E. (unsurveyed), Coconino County, at gaging station in Grand Canyon National Park, on left bank, 0.2 mi (0.3 km) upstream from Kaibab Bridge, 0.4 mi (0.6 km) upstream from Bright Angel Creek, 4.5 mi (7.2 km) northeast of village of Grand Canyon, 26 mi (42 km) downstream from Little Colorado River, 104 mi (167 km) downstream from Glen Canyon Dam, and 267 mi (430 km) upstream from Hoover Dam.

DRAINAGE AREA.--137,800 mi^2 (356,900 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: August 1925 to November 1942, September 1943 to current year.
Water temperatures: October 1936 to October 1942, September 1943 to current year.
Sediment records: October 1925 to November 1942, September 1943 to September 1972.

EXTREMES.--Current year:
Water temperatures: Maximum, 13.5°C Oct. 16; minimum, 6.5°C on several days during January and February.

Period of record:
Water temperatures: Maximum, 23.0°C Sept. 4, 1967, Sept. 9, 10, 1968; minimum, 4.0°C Jan. 4, 1966, Jan. 7, 1968.

REMARKS.--Because of the regulation of flow by Glen Canyon Dam since Mar. 13, 1963, and the subsequent filling of Lake Powell, extreme values for the period of record include only those obtained after July 31, 1965. Daily specific conductance values for water years 1971-74 are field determinations. Daily specific conductance measurements discontinued Mar. 1974.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT.								
25...	1115	15300	7.8	10	80	27	100	4.5
NOV.								
06...	1200	18400	8.1	10	81	27	94	4.2
DEC.								
03...	1100	3300	7.9	20	78	27	110	4.4
JAN.								
04...	1515	24400	8.1	50	66	23	72	3.6
FEB.								
28...	1400	13400	7.7	90	72	25	98	4.2
MAR.								
08...	1045	9070	8.1	40	76	26	93	4.5
MAY								
01...	1400	12400	8.0	70	81	29	100	4.1
JUNE								
03...	1300	11700	8.3	10	78	28	95	3.8
JULY								
23...	1445	23300	9.3	20	75	24	82	4.0
AUG.								
01...	1300	21600	8.6	20	71	26	78	3.9
SEP.								
01...	0845	22200	8.6	280	64	25	87	4.1

09402500 COLORADO RIVER NEAR GRAND CANYON, ARIZ.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.									
25...	182	0	230	96	.2	.57	.03	100	666
NOV.									
06...	174	0	240	78	.2	.65	.01	80	647
DEC.									
03...	186	0	250	100	.2	.51	.02	120	678
JAN.									
04...	154	0	220	52	.3	.42	.02	80	539
FEB.									
28...	169	0	220	87	.4	.46	.00	110	625
MAR.									
08...	168	0	240	79	.4	.57	.00	110	629
MAY									
01...	185	0	250	90	.4	.53	.02	120	691
JUNE									
03...	181	0	240	85	.2	.52	.02	130	638
JULY									
23...	170	0	220	62	.3	.51	.01	120	595
AUG.									
01...	167	0	220	60	.3	.52	.01	100	583
SEP.									
01...	168	--	200	67	.3	.49	.00	120	574

DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.								
25...	632	.91	310	160	2.5	1050	8.2	11.5
NOV.								
06...	621	.88	310	170	2.3	994	8.2	10.0
DEC.								
03...	672	.92	310	150	2.7	1080	8.2	9.0
JAN.								
04...	523	.73	260	130	1.9	836	8.2	8.0
FEB.								
28...	600	.85	280	140	2.5	981	8.2	7.5
MAR.								
08...	613	.86	300	160	2.4	996	8.1	8.0
MAY								
01...	656	.94	320	170	2.4	1070	8.2	11.0
JUNE								
03...	630	.87	310	160	2.3	1020	8.3	11.0
JULY								
23...	563	.81	290	150	2.1	927	7.9	12.0
AUG.								
01...	553	.79	280	150	2.0	870	7.8	10.0
SEP.								
01...	541	.78	260	130	2.3	870	--	10.5

09402500 COLORADO RIVER NEAR GRAND CANYON, ARIZ.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	980	1100	1150	900	980	---	---	---	---	---	---
2	1100	1000	1200	920	900	---	---	---	---	---	---	---
3	1000	990	1100	900	1000	---	---	---	---	---	---	---
4	1000	990	1020	880	1000	1000	---	---	---	---	---	---
5	1000	990	950	800	1000	1100	---	---	---	---	---	---
6	1000	990	920	825	1000	1100	---	---	---	---	---	---
7	960	980	900	900	1100	1020	---	---	---	---	---	---
8	960	950	950	820	---	1000	---	---	---	---	---	---
9	1000	975	950	820	---	1020	---	---	---	---	---	---
10	1000	1000	950	830	---	---	---	---	---	---	---	---
11	1000	1000	950	820	---	1000	---	---	---	---	---	---
12	960	1000	900	820	---	---	---	---	---	---	---	---
13	1000	1100	1000	850	---	950	---	---	---	---	---	---
14	1000	1000	960	900	---	1000	---	---	---	---	---	---
15	1000	1000	---	890	---	1000	---	---	---	---	---	---
16	1200	1000	920	---	---	1000	---	---	---	---	---	---
17	990	1000	950	---	---	1000	---	---	---	---	---	---
18	900	1000	1000	880	---	1000	---	---	---	---	---	---
19	900	1200	1000	880	---	1100	---	---	---	---	---	---
20	950	1220	1060	900	---	---	---	---	---	---	---	---
21	---	1000	1000	880	---	1100	---	---	---	---	---	---
22	1050	1000	1000	850	---	1100	---	---	---	---	---	---
23	---	1050	1000	850	---	1200	---	---	---	---	---	---
24	---	1200	960	900	---	1100	---	---	---	---	---	---
25	1000	1100	---	820	950	1200	---	---	---	---	---	---
26	---	1170	1200	900	1100	1300	---	---	---	---	---	---
27	900	1020	1150	900	950	1050	---	---	---	---	---	---
28	990	900	1000	980	980	1000	---	---	---	---	---	---
29	1000	980	---	1000	---	1000	---	---	---	---	---	---
30	1000	1000	1100	920	---	1000	---	---	---	---	---	---
31	1000	---	950	950	---	1000	---	---	---	---	---	---
MEAN	995	1020	1010	885	---	1040	---	---	---	---	---	---

YEAR MAX 1300 MIN 800 MEAN 909

09402500 COLORADO RIVER NEAR GRAND CANYON, ARIZ.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.5	11.0	11.0	10.0	9.5	8.5	8.0	8.0	7.0	8.5	8.0
2	13.0	12.0	11.0	11.0	10.0	9.5	8.0	6.5	8.0	8.0	9.0	8.5
3	12.0	12.0	11.0	11.0	10.0	9.5	8.0	6.5	8.0	8.0	9.0	8.5
4	12.0	11.5	11.0	10.5	10.0	9.5	8.5	8.0	8.0	8.0	9.0	8.5
5	11.5	11.0	11.0	10.5	10.0	10.0	8.5	8.0	8.0	7.0	9.0	8.5
6	11.5	11.5	11.0	10.0	10.0	10.0	8.5	8.0	8.0	7.0	9.0	8.5
7	12.0	11.5	10.5	10.5	10.0	9.5	8.5	8.5	8.0	6.5	8.5	8.0
8	12.0	11.5	11.0	10.5	10.0	10.0	8.5	8.5	6.5	6.5	8.5	8.5
9	12.0	11.5	11.0	11.0	10.0	9.5	8.5	8.5	6.5	6.5	8.5	8.5
10	12.0	11.5	11.0	11.0	10.0	10.0	8.5	8.5	6.5	6.5	9.0	8.5
11	12.0	11.0	11.0	11.0	10.0	9.5	8.5	8.0	7.0	6.5	9.0	8.5
12	11.0	10.5	11.0	11.0	10.0	9.5	8.0	8.0	7.0	6.5	9.0	9.0
13	11.5	11.0	11.5	11.0	10.0	9.5	8.0	8.0	7.0	7.0	9.5	9.0
14	12.0	11.5	11.5	11.0	10.0	10.0	8.0	8.0	8.0	7.0	9.5	9.5
15	12.0	12.0	11.0	11.0	10.5	10.0	8.0	8.0	8.0	8.0	10.0	9.5
16	13.5	12.0	11.0	10.5	10.0	10.0	8.0	8.0	8.0	8.0	10.5	10.0
17	12.0	12.0	10.5	10.5	9.5	9.0	8.0	8.0	8.0	8.0	10.5	10.0
18	12.0	12.0	10.5	10.0	9.0	9.0	8.5	8.0	8.0	8.0	10.5	10.5
19	12.0	12.0	10.5	10.0	9.0	9.0	8.5	8.0	8.5	8.0	11.0	10.5
20	12.0	12.0	10.0	10.0	9.0	9.0	8.5	8.5	8.0	8.0	11.0	10.5
21	12.0	12.0	10.0	10.0	9.0	8.5	8.5	8.5	8.0	7.0	11.0	10.5
22	12.0	12.0	10.0	10.0	8.5	8.0	8.5	8.0	8.0	7.0	11.0	10.5
23	13.0	12.0	10.0	10.0	8.5	8.0	8.0	7.0	8.0	7.0	10.5	10.0
24	12.0	12.0	10.0	10.0	8.5	8.0	7.0	6.5	8.0	7.0	10.5	10.0
25	12.0	11.0	10.5	10.0	8.0	8.0	7.0	7.0	8.0	7.0	11.0	10.0
26	11.5	11.0	10.0	9.5	8.0	7.0	7.0	7.0	8.0	7.0	11.5	11.0
27	11.0	10.5	9.5	9.5	8.0	7.0	7.0	7.0	8.0	7.0	11.0	10.0
28	11.5	11.0	10.0	10.0	8.0	8.0	7.0	7.0	8.0	8.0	10.0	9.5
29	11.5	11.5	10.0	9.5	8.0	8.0	7.0	6.5	---	---	9.5	9.5
30	11.5	10.5	10.0	9.5	9.0	8.0	8.0	7.0	---	---	10.0	9.5
31	11.0	11.0	---	---	9.0	8.5	8.0	7.0	---	---	10.0	10.0
MONTH	13.5	10.5	11.5	9.5	10.5	7.0	8.5	6.5	8.5	6.5	11.5	8.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	10.0	11.0	10.0	10.5	10.5	12.0	11.5	10.5	10.0	11.0	10.0
2	10.5	10.0	11.5	11.0	11.0	10.5	12.0	11.0	11.0	10.0	11.0	10.5
3	10.5	10.0	11.5	11.0	12.0	11.0	11.5	10.5	11.0	11.0	11.0	11.0
4	10.0	9.0	11.5	11.0	12.0	11.5	11.5	10.5	11.0	11.0	11.5	11.0
5	9.5	9.0	11.5	11.0	11.5	11.0	11.0	10.5	11.0	11.0	11.0	11.0
6	9.5	9.5	12.0	11.0	11.5	11.0	11.5	11.0	12.0	11.0	11.0	11.0
7	10.0	9.5	12.0	11.5	12.0	11.5	11.5	11.0	12.0	11.0	11.5	11.0
8	10.5	10.0	12.0	11.5	12.0	11.5	11.5	11.0	11.0	10.0	11.5	11.5
9	10.5	10.0	12.0	11.5	12.0	11.5	12.0	11.0	11.0	11.0	12.0	11.5
10	10.0	9.5	11.5	11.0	12.0	11.5	11.5	10.0	11.0	11.0	12.0	11.5
11	10.0	9.5	11.0	10.5	12.0	11.0	11.5	10.0	11.0	11.0	11.5	11.5
12	9.5	9.0	11.0	10.5	12.0	11.0	11.5	10.5	11.0	11.0	11.5	11.5
13	9.5	9.0	11.0	10.5	11.5	11.0	11.5	10.5	11.0	11.0	11.5	11.5
14	9.5	9.5	11.0	10.5	11.5	10.5	11.5	11.0	11.5	11.0	11.5	11.0
15	9.5	9.5	11.0	10.0	11.5	10.5	11.5	11.0	11.5	11.0	12.0	11.0
16	10.0	9.5	10.5	10.0	11.0	10.5	11.0	11.0	11.0	10.0	13.0	12.0
17	10.5	10.0	10.5	10.0	11.0	11.0	11.0	10.0	11.0	10.0	13.0	12.0
18	10.5	10.0	10.0	10.0	11.0	10.5	11.0	11.0	11.0	10.0	12.0	11.5
19	10.0	10.0	10.0	10.0	11.0	10.5	11.0	10.5	11.0	10.0	11.5	11.5
20	10.0	9.0	11.0	10.0	11.5	10.5	11.0	10.5	11.0	10.0	11.5	11.5
21	10.0	9.0	11.0	10.0	11.5	11.0	11.0	11.0	11.0	10.0	11.5	11.5
22	10.0	10.0	11.0	10.0	11.5	11.0	12.0	11.5	11.0	10.0	11.5	11.0
23	10.5	10.0	10.5	10.0	11.5	11.0	13.0	11.0	11.0	10.0	11.0	11.0
24	10.0	9.5	10.0	10.0	11.5	11.5	12.0	10.5	11.0	10.0	11.0	11.0
25	10.0	9.5	10.5	10.0	12.0	11.0	11.5	10.5	11.0	10.0	11.0	11.0
26	10.0	10.0	11.0	10.0	12.0	11.0	11.5	10.5	11.0	10.0	11.5	11.0
27	10.5	10.0	12.0	10.5	11.5	10.5	11.5	10.5	11.0	10.0	11.0	11.0
28	10.5	10.0	12.0	11.0	11.5	10.5	11.5	11.0	11.0	10.0	11.0	10.5
29	10.0	10.0	11.5	10.5	11.5	10.5	11.5	11.0	11.0	10.0	10.5	10.0
30	10.0	10.0	11.0	10.0	12.0	11.0	11.5	10.0	11.0	10.0	10.5	10.5
31	---	---	10.5	10.5	---	---	11.5	10.0	11.0	10.0	---	---
MONTH	10.5	9.0	12.0	10.0	12.0	10.5	13.0	10.0	12.0	10.0	13.0	10.0
YEAR	13.5	0.5										

09403000 BRIGHT ANGEL CREEK NEAR GRAND CANYON, ARIZ.

LOCATION.--Lat 36°06'11", long 112°05'44", in sec.5, T.31 N., R.3 E. (unsurveyed), Coconino County, at gaging station in Grand Canyon National Park, on right bank 0.4 mi (0.6 km) upstream from mouth, and 4 mi (6 km) northeast of village of Grand Canyon.

DRAINAGE AREA.--101 mi^2 (262 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1952 to March 1974 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT.								
25...	1945	17	6.3	20	39	21	3.8	1.1
NOV.								
06...	1350	19	6.3	0	36	21	3.6	.9
DEC.								
03...	1220	20	6.3	60	40	21	2.9	1.0
JAN.								
04...	1605	20	6.9	10	41	21	4.5	1.0
FEB.								
20...	1530	17	6.0	40	32	21	4.0	1.0
MAR.								
08...	1220	24	6.2	30	37	21	3.7	1.1

09403000 BRIGHT ANGEL CREEK NEAR GRAND CANYON, ARIZ.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.									
25...	206	7	7.5	3.8	.0	.01	.03	10	177
NOV.									
06...	196	7	7.8	3.6	.0	.11	.01	20	174
DEC.									
03...	205	2	8.9	4.5	.1	.03	.03	20	200
JAN.									
04...	213	7	7.6	4.0	.1	.10	.03	100	179
FEB.									
28...	194	0	9.5	4.7	.1	.03	.00	30	176
MAR.									
08...	208	0	8.3	4.1	.1	.04	.01	50	180

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.								
25...	191	.24	180	3	.1	340	8.7	14.0
NOV.								
06...	183	.24	180	4	.1	330	8.5	12.0
DEC.								
03...	188	.27	190	15	.1	343	8.7	--
JAN.								
04...	199	.24	190	2	.1	359	8.5	2.5
FEB.								
28...	174	.24	170	7	.1	324	8.3	9.5
MAR.								
08...	184	.24	180	8	.1	345	8.3	8.5

09415000 VIRGIN RIVER AT LITTLEFIELD, ARIZ.

LOCATION (revised).--Lat 36°53'30", long 113°55'25", in SW¼SW¼ sec.4, T.40 N., R.15 W., Mohave County, at gaging station on right bank 0.5 mi (0.8 km) downstream from Beaver Dam Wash, 0.4 mi (0.6 km) upstream from Littlefield, and 36 mi (58 km) upstream from waterline of Lake Mead at elevation 1,221 ft (372.2 m) above mean sea level.

DRAINAGE AREA.--5,090 mi^2 (13,180 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1949 to current year.
Water temperatures: October 1947 to current year.
Sediment records: October 1947 to September 1968.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
OCT.												
25...	1330	68	21	360	110	280	34	342	0	1100	380	.9
DEC.												
04...	1330	220	19	240	75	220	23	335	0	660	300	.6
JAN.												
29...	1100	231	19	240	73	220	16	330	0	680	300	.7
MAR.												
12...	1000	198	18	240	77	220	24	300	0	730	310	.7
25...	1000	120	18	270	86	260	29	310	0	810	350	1.0
APR.												
28...	1700	68	20	360	110	240	29	311	0	1100	370	1.1
MAY												
30...	1030	60	19	380	110	250	29	311	0	1100	360	1.2
JUNE												
20...	0930	64	19	380	110	270	16	314	0	1100	380	.8
JULY												
30...	0700	58	20	370	120	270	32	324	0	1100	390	1.0
AUG.												
20...	0830	63	20	370	110	270	27	295	0	1100	390	1.0
23...	1000	64	20	370	120	270	28	327	0	1100	390	.9
SEP.												
25...	1800	60	21	360	120	270	31	304	0	1100	390	1.0

09415000 VIRGIN RIVER AT LITTLEFIELD, ARIZ.--Continued

EXTREMES.--Current year:
Specific conductance: Maximum daily, 4,100 micromhos Aug. 7; minimum daily, 1,910 micromhos Mar. 4.
Water temperatures: Maximum, 32.0°C Aug. 3; minimum, 4.0°C Jan. 2.

Period of record:
Specific conductance (1949-74): Maximum daily, 4,650 micromhos Aug. 21, 1966; minimum daily, 685 micromhos May 12, 1973.
Water temperatures: Maximum, 33.5°C July 7, 1953; minimum, 1.5°C Jan. 4, 1949; Jan. 4, 1950.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)
OCT.												
25...	.50	.13	1100	2460	3.35	1400	1100	3.3	3230	7.5	20.5	--
DEC.												
04...	.54	.07	660	1710	2.33	910	630	3.2	2460	7.8	11.5	10.3
JAN.												
29...	.56	.02	660	1710	2.33	900	630	3.2	2480	7.7	5.0	--
MAR.												
12...	1.4	.04	670	1770	2.41	920	670	3.2	2500	7.6	15.0	10.2
25...	.34	.03	800	1980	2.69	1000	770	3.5	2860	7.6	17.0	--
APR.												
26...	.21	.02	1000	2390	3.25	1400	1100	2.8	3320	7.5	24.0	--
MAY												
30...	.15	.03	1100	2400	3.26	1400	1100	2.9	3340	7.4	22.0	--
JUNE												
20...	.20	.00	1100	2430	3.30	1400	1100	3.1	3300	7.3	22.0	9.8
JULY												
30...	.18	.03	1100	2460	3.35	1400	1200	3.1	3360	7.3	25.0	--
AUG.												
20...	.19	.07	1100	2440	3.32	1400	1200	3.2	3500	7.0	28.0	9.3
23...	.15	.01	1100	2460	3.35	1400	1200	3.1	3350	7.2	23.0	--
SEP.												
25...	.13	.01	1100	2440	3.32	1400	1200	3.1	3530	--	25.0	--

09415000 VIRGIN RIVER AT LITTLEFIELD, ARIZ.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3280	3210	2580	2550	2580	2840	3100	3250	3250	3450	3300	3300
2	3230	3350	2590	2860	2500	2800	3050	3320	3250	3490	3100	3440
3	3360	3300	2000	2850	2490	2320	2340	3380	3320	3400	3400	3520
4	3310	3250	2590	2940	2600	1910	2700	3400	3300	3390	3500	3490
5	3400	3250	2700	2160	2650	2400	2950	3390	3300	3410	3800	3470
6	3370	3150	2720	2120	2660	2540	3190	3310	3300	3450	3700	3280
7	3330	3100	2730	2030	2620	2500	3290	3400	3170	3380	4100	3680
8	3330	3100	2700	1990	2620	2450	3450	3400	3470	3450	3400	3670
9	3290	3060	2780	2270	2650	2340	3420	3400	3390	3410	3350	3620
10	3420	3090	2730	2380	2600	2340	3480	3330	3300	3320	3400	3550
11	3390	3050	2730	2030	2600	2480	3310	3360	3400	3450	3420	3640
12	3330	3050	2730	2330	2670	2450	3450	3500	3300	3450	3410	3630
13	3350	3120	2800	---	2610	2530	3350	3440	3420	3420	3340	3620
14	3310	3060	2780	---	2700	2550	3430	3210	3340	3410	3400	3620
15	3200	3060	---	2010	2710	2660	3320	3480	3400	3200	3400	3620
16	3080	2990	2820	---	2810	2580	3420	3390	3350	3410	3500	3620
17	3290	2990	2700	2000	2740	2600	3490	3380	3380	3420	3450	3620
18	3280	2890	2890	1940	2680	2540	3500	3360	3440	3400	3450	3600
19	3370	2770	2800	1960	2780	2630	3490	3470	3550	3310	3400	3580
20	3290	2340	2820	---	2780	2740	3490	3350	3500	3400	3400	3600
21	3290	2620	2880	1980	2830	2860	3480	3380	3470	3480	3400	3600
22	3280	2640	2900	2020	2810	2880	3440	3410	3400	3310	3250	3600
23	3320	2610	2890	2260	2760	3100	3500	3410	3410	3310	3320	3600
24	3240	2540	2720	2080	2750	3000	3480	3410	3500	3100	3410	3610
25	3280	2490	2700	1930	2700	2900	3500	3440	3490	3680	3380	3620
26	3280	2570	2700	2500	3000	2930	3500	3450	3490	3510	3360	3620
27	3300	2560	2650	2120	2910	2800	3450	3490	3480	3470	3490	3620
28	3340	2510	2800	2250	2910	2910	3500	3490	3500	3480	3380	3600
29	3290	2610	2480	1960	---	3000	3500	3480	3500	3480	3500	3620
30	3270	2570	---	2560	---	3140	3490	3480	3500	3420	3410	3580
31	3230	---	---	2470	---	2850	---	3440	---	3490	3490	---
MEAN	3300	2900	2710	2240	2700	2660	3340	3400	3400	3410	3440	3570

YEAR MAX 4100 MIN 1910 MEAN 3100

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	18.0	14.0	9.0	11.0	16.0	20.0	23.0	29.0	24.0	30.0	25.0
2	19.0	17.0	10.0	4.0	12.0	13.0	18.0	23.0	22.0	28.0	31.0	27.0
3	22.0	14.0	11.5	5.0	9.0	10.0	19.0	22.0	28.0	30.0	32.0	27.0
4	22.0	17.0	10.0	6.0	12.0	12.0	18.0	22.0	27.0	30.0	25.0	28.0
5	22.0	16.0	9.0	5.0	11.0	16.0	25.0	16.0	29.0	23.0	26.0	27.0
6	22.0	16.0	9.0	6.0	9.0	16.0	20.0	26.0	29.0	23.0	27.0	26.0
7	20.0	18.0	11.0	9.0	10.0	13.0	24.0	25.0	21.0	22.0	25.0	27.0
8	18.0	18.0	11.0	8.0	10.0	15.0	26.0	28.0	28.0	28.0	26.0	27.0
9	20.0	19.0	11.0	10.0	11.0	13.0	17.0	25.0	29.0	29.0	27.0	27.0
10	21.0	15.0	12.0	9.0	11.0	11.0	17.0	27.0	27.0	25.0	26.0	25.0
11	19.0	17.0	12.0	10.0	12.0	17.0	29.0	26.0	29.0	26.0	23.0	27.0
12	18.0	17.0	10.0	8.0	11.0	---	21.0	25.0	31.0	31.0	22.0	28.0
13	22.0	15.0	12.0	10.0	13.0	---	23.0	25.0	31.0	28.0	23.0	26.0
14	22.0	14.0	11.0	11.0	13.0	---	21.0	27.0	26.0	27.0	24.0	27.0
15	23.0	15.0	---	11.0	13.0	---	21.0	23.0	26.0	29.0	26.0	27.0
16	22.0	15.0	13.0	11.0	12.0	18.0	18.0	23.0	24.0	29.0	26.0	27.0
17	22.0	16.0	12.0	10.0	14.0	18.0	23.0	24.0	28.0	28.0	24.0	27.0
18	22.0	14.0	10.0	10.0	12.0	17.0	21.0	18.0	28.0	28.0	24.0	26.0
19	22.0	13.0	12.0	11.0	13.0	18.0	21.0	18.0	24.0	25.0	22.0	28.0
20	15.0	11.0	12.0	11.0	9.0	17.0	25.0	26.0	27.0	30.0	25.0	29.0
21	21.0	12.0	11.0	9.0	10.0	18.0	24.0	26.0	26.0	28.0	25.0	25.0
22	19.0	10.0	12.0	8.0	12.0	17.0	24.0	25.0	30.0	27.0	28.0	27.0
23	18.0	9.0	11.0	10.0	15.0	16.0	24.0	26.0	27.0	30.0	26.0	29.0
24	21.0	9.0	10.0	10.0	12.0	19.0	22.0	29.0	28.0	28.0	27.0	29.0
25	19.0	9.0	10.0	7.0	15.0	19.0	20.0	23.0	26.0	30.0	26.0	25.0
26	13.0	9.0	12.0	10.0	16.0	18.0	22.0	27.0	28.0	27.0	25.0	26.0
27	12.0	11.0	11.0	10.0	15.0	19.0	25.0	26.0	26.0	29.0	26.0	25.0
28	19.0	12.0	11.0	10.0	16.0	20.0	24.0	25.0	25.0	31.0	25.0	25.0
29	17.0	10.0	10.0	7.0	---	19.0	26.0	24.0	31.0	30.0	27.0	27.0
30	17.0	10.0	12.0	12.0	---	17.0	25.0	23.0	24.0	25.0	23.0	25.0
31	18.0	---	---	10.0	---	21.0	---	25.0	---	24.0	23.0	---
MEAN	19.5	14.0	11.0	9.0	12.0	16.5	22.0	24.0	27.0	27.5	25.5	26.5

YEAR MAX 32.0 MIN 4.0 MEAN 19.5

09415200 VIRGIN RIVER NEAR RIVERSIDE, NEV.

LOCATION.--Lat 36°41'13", long 114°16'20", in NW¼SW¼ sec.27, T.14 S., R.69 E., Clark County, 4.6 mi (7.4 km) downstream from Riverside bridge, 14 mi (22 km) southwest of Mesquite, and about 10 mi (16 km) upstream from high-water line of Lake Mead at elevation 1,221.4 ft (372.3 m) above mean sea level. After January 1974, samples were collected at Riverside (streamflow gaging station 09415190).

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1974 (data for period January 1964 to September 1968 are available from U.S. Environmental Protection Agency).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT. 03...	1009	E5.0	440	200	540	39	238	0	1800	750
JAN. 17...	1200	239	240	88	260	15	257	0	800	350

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
OCT. 03...	4140	5.63	1900	1700	5.4	5240	8.1	19.5	9.1
JAN. 17...	1900	2.58	960	750	3.6	2690	8.0	10.0	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
JULY 26...	1100	1.3	25	430	160	460	38	255	0	1600

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
JULY 26...	580	.55	.05	.60	.39	7.2	7.6	8.2	2.7

DATE	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
JULY 26...	.08	3420	4.65	1700	1500	4.8	4620	8.4	31.0

09419700 LAS VEGAS WASH NEAR HENDERSON, NEV.

LOCATION.--Lat 36°05'20", long 114°59'05", in SE¼SW¼ sec.30, T.21 S., R.63 E., Clark County, at gaging station 3.5 mi (5.6 km) north of Henderson, and 6.0 mi (9.6 km) upstream from high-water line of Lake Mead at elevation 1,221.4 ft (372.3 m) above mean sea level.

DRAINAGE AREA.--2,125 mi^2 (5,504 km^2), of which 1,518 mi^2 (3,932 km^2) contribute directly to surface runoff.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974 (data for period January 1964 to September 1968 are available from U.S. Environmental Protection Agency).

REMARKS.--Discharge includes sewage effluent and perhaps some waste water from industrial plants.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
27...	1250	61	34	170	76	310	26	228	0	630	360
NOV.											
17...	1450	53	--	--	--	--	--	--	--	--	--
DEC.											
21...	0820	67	--	--	--	--	--	--	--	--	--
JAN.											
14...	1530	68	31	170	85	300	21	277	0	740	350
FEB.											
11...	0820	63	--	--	--	--	--	--	--	--	--
MAR.											
18...	1145	68	--	--	--	--	--	--	--	--	--
APR.											
17...	1100	67	35	180	86	350	20	274	0	740	380
MAY											
20...	1300	67	--	--	--	--	--	--	--	--	--
AUG.											
13...	0810	39	42	210	96	380	24	330	0	880	420
SEP.											
30...	1215	65	--	--	--	--	--	--	--	--	--

09419700 LAS VEGAS WASH NEAR HENDERSON, NEV.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.											
27...	--	4.6	--	.43	--	5.0	2.0	3.4	5.4	--	7.5
NOV.											
17...	--	4.8	--	.51	--	5.3	7.4	--	--	--	--
DEC.											
21...	--	6.2	--	.61	--	6.8	3.4	--	--	--	--
JAN.											
14...	--	3.4	--	.55	--	3.9	11	.08	11	--	8.4
FEB.											
11...	--	4.7	--	.49	--	5.2	9.5	--	--	--	--
MAR.											
18...	--	2.0	--	.58	--	2.6	11	--	--	--	--
APR.											
17...	--	3.6	--	.46	--	4.1	7.2	.50	7.7	--	8.4
MAY											
20...	--	4.1	--	.43	--	4.6	3.1	--	--	--	--
AUG.											
13...	.90	--	1.6	--	2.5	--	7.5	3.5	11	14	6.1
SEP.											
30...	--	--	--	--	--	--	--	--	--	--	6.7

DATE	DIS-SOL-VED-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)
OCT.										
27...	7.4	1740	2.37	740	550	5.0	2560	7.2	12.0	--
NOV.										
17...	6.0	--	--	--	--	--	2680	--	13.0	--
DEC.										
21...	7.1	--	--	--	--	--	2750	--	6.0	--
JAN.										
14...	8.2	1850	2.52	770	550	4.7	2740	8.0	9.5	1.1
FEB.										
11...	7.2	--	--	--	--	--	2900	--	6.0	--
MAR.										
18...	8.6	--	--	--	--	--	2940	--	15.5	--
APR.										
17...	7.6	1940	2.64	800	580	5.4	2910	7.2	12.0	1.6
MAY										
20...	6.7	--	--	--	--	--	2850	--	13.5	--
AUG.										
13...	5.9	2210	3.01	920	650	5.5	3270	6.6	20.0	--
SEP.										
30...	--	--	--	--	--	--	2470	--	16.0	--

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NEV.

LOCATION.--Lat 36°07'20", long 114°54'15", in NE¼SE¼ sec.14, T.21 S., R.63 E., Clark County, at gaging station 11 mi (18 km) northwest of Boulder City, and about 0.8 mi (1.3 km) upstream from high-water line of Lake Mead at elevation 1,221.4 ft (372.3 m) above mean sea level.

DRAINAGE AREA.--2,193 mi^2 (5,680 km^2), of which 1,586 mi^2 (4,108 km^2) contribute directly to surface runoff.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974 (data for period January 1964 to September 1968 are available from U.S. Environmental Protection Agency).

REMARKS.--Discharge includes sewage effluent and waste water from industrial plants.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT.										
27...	1415	76	44	--	340	140	490	50	241	0
NOV.										
17...	1345	73	--	--	--	--	--	--	--	--
DEC.										
21...	0755	76	--	--	--	--	--	--	--	--
JAN.										
14...	1300	69	40	--	320	130	460	41	235	0
FEB.										
11...	0945	69	--	--	--	--	--	--	--	--
MAR.										
18...	1450	65	--	--	--	--	--	--	--	--
APR.										
17...	1420	67	40	--	320	130	460	40	228	0
MAY										
20...	1400	57	--	--	--	--	--	--	--	--
JUNE										
25...	1220	43	48	--	360	140	520	49	271	0
AUG.										
13...	0945	47	50	4100	380	150	540	46	280	0
27...	0715	63	--	3000	--	--	--	--	--	--
SEP.										
30...	1300	74	--	3500	--	--	--	--	--	--

DATE	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)
OCT.									
27...	1200	740	--	8.6	--	.01	--	8.6	.11
NOV.									
17...	--	--	--	9.8	--	.01	--	9.8	.04
DEC.									
21...	--	--	--	11	--	.04	--	11	.40
JAN.									
14...	1200	700	--	8.9	--	.49	--	9.4	2.3
FEB.									
11...	--	--	--	13	--	.06	--	13	.41
MAR.									
18...	--	--	--	9.6	--	.03	--	9.6	.62
APR.									
17...	1200	660	--	9.8	--	.02	--	9.8	.20
MAY									
20...	--	--	--	--	--	--	7.3	--	.07
JUNE									
25...	1200	760	--	6.1	--	.05	--	6.1	2.6
AUG.									
13...	1300	790	--	--	--	--	--	--	.21
27...	--	--	7.1	--	.00	--	7.1	--	.06
SEP.									
30...	--	--	3.5	--	.41	--	3.9	--	.04

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NEV.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)
OCT.									
27...	.55	.66	--	5.0	4.9	--	3160	4.30	1400
NOV.									
17...	--	--	--	--	3.7	--	--	--	--
DEC.									
21...	--	--	--	--	4.7	--	--	--	--
JAN.									
14...	.90	3.2	--	5.6	5.1	--	3050	4.15	1300
FEB.									
11...	--	--	--	--	5.0	--	--	--	--
MAR.									
18...	--	--	--	--	5.3	--	--	--	--
APR.									
17...	.80	1.0	--	5.1	4.8	--	3010	4.09	1300
MAY									
20...	.81	.88	8.2	3.8	--	--	--	--	--
JUNE									
25...	--	--	--	--	.01	--	3240	4.41	1500
AUG.									
13...	.67	.88	--	3.9	3.7	3610	3390	4.91	1600
27...	1.1	1.2	8.3	4.4	--	--	--	--	--
SEP.									
30...	.86	.90	4.8	5.2	--	--	--	--	--

DATE	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
27...	1200	5.6	4740	8.1	14.5	--	10.5	--	--
NOV.									
17...	--	--	4470	--	12.5	--	--	--	--
DEC.									
21...	--	--	4140	--	5.5	--	--	--	--
JAN.									
14...	1100	5.5	4220	8.2	8.0	--	10.5	--	--
FEB.									
11...	--	--	4230	--	5.5	--	--	--	--
MAR.									
18...	--	--	4340	--	17.5	--	--	--	--
APR.									
17...	1100	5.5	4260	8.0	14.5	--	9.6	--	--
MAY									
20...	--	--	4270	--	14.5	30	--	37	8.9
JUNE									
25...	1300	5.9	4640	8.0	21.5	--	--	--	8.0
AUG.									
13...	1300	5.9	4900	7.7	20.0	40	8.8	24	7.5
27...	--	--	4530	--	18.0	40	--	33	--
SEP.									
30...	--	--	4280	--	16.5	10	--	14	11

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NEV.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DIELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
AUG. 13...	0945	47	.01	.0	.00	.00	.00	.01	.00	.00	.00

DATE	LINDANE (UG/L)	TOXAPHENE (UG/L)	DIAZINON (UG/L)	MALATHION (UG/L)	PARATHION (UG/L)	METHYL PARATHION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	PCB (UG/L)
AUG. 13...	.06	0	.02	.00	.00	.00	.03	.00	.00	.0

09419800 LAS VEGAS WASH NEAR BOULDER CITY, NEV.--Continued

PERIODIC DAILY SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
JAN.					
14...	1300	69	8.0	264	65
FEB.					
11...	0945	69	5.5	138	25
MAR.					
20...	1300	50	14.5	144	19
APR.					
17...	1310	65	14.5	117	21
MAY					
20...	1400	57	19.5	166	26
JUNE					
25...	1220	43	21.5	129	15
AUG.					
13...	0945	47	20.0	204	26
SEP.					
30...	1300	74	16.5	200	40

COLORADO RIVER MAIN STEM

09421000 LAKE MEAD AT HOOVER DAM, ARIZ.-NEV.

LOCATION.--Lat 36°00'58", long 114°44'13", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, on State line between Mohave County, Ariz., and Clark County, Nev., at gaging station in center of Hoover Dam on Colorado River.

DRAINAGE AREA.--167,800 mi² (434,600 km²), approximately.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DEPTH (FT)	ELEVATION ABOVE MEAN SEA LEVEL (FT)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
NOV.										
13...	.0	1179	8.0	84	31	110	5.0	160	0	450
13...	10	1169	--	--	--	--	--	130	0	--
13...	25	1154	--	--	--	--	--	130	0	--
13...	75	1104	--	--	--	--	--	130	0	--
13...	125	1054	8.7	87	30	108	5.0	158	0	450
13...	175	1004	--	--	--	--	--	157	0	--
13...	225	954	--	--	--	--	--	150	0	--
13...	275	904	9.2	85	28	98	4.0	150	0	450
13...	285	894	8.9	85	28	98	4.0	154	0	450
13...	325	854	--	--	--	--	--	160	0	--
13...	375	804	--	--	--	--	--	164	0	--
13...	425	754	9.4	85	29	95	4.0	164	0	450
13...	460	719	--	--	--	--	--	161	0	--
28...	.0	1179	8.4	86	30	110	5.0	164	0	450
28...	10	1169	--	--	--	--	--	166	0	--
28...	25	1154	--	--	--	--	--	166	0	--
28...	75	1104	--	--	--	--	--	166	0	--
28...	125	1054	8.0	86	30	110	4.0	164	0	450
28...	175	1004	8.9	84	30	100	4.0	157	0	450
28...	225	954	8.4	84	28	98	4.0	157	0	450
28...	275	904	--	--	--	--	--	160	0	--
28...	286	893	8.9	86	29	98	4.0	160	0	450
28...	325	854	--	--	--	--	--	160	0	--
28...	375	804	--	--	--	--	--	157	0	--
28...	425	754	10	85	29	97	4.0	160	0	450
28...	460	719	--	--	--	--	--	161	0	--
DEC.										
27...	.0	1177	8.7	86	31	110	5.0	160	0	450
27...	10	1167	--	--	--	--	--	--	--	--
27...	25	1152	--	--	--	--	--	--	--	--
27...	75	1102	--	--	--	--	--	--	--	--
27...	125	1052	8.5	86	31	110	5.0	160	0	450
27...	175	1002	8.5	86	30	100	5.0	159	0	450
27...	225	952	8.5	85	28	98	5.0	158	0	450
27...	275	902	--	--	--	--	--	--	--	--
27...	285	892	8.9	85	28	98	4.0	161	0	450
27...	325	852	--	--	--	--	--	--	--	--
27...	375	802	--	--	--	--	--	--	--	--
27...	425	752	9.3	85	29	98	5.0	162	0	450
27...	456	721	--	--	--	--	--	--	--	--
JAN.										
30...	.0	1188	8.0	86	30	100	4.0	163	0	450
30...	10	1178	--	--	--	--	--	163	0	--
30...	25	1155	--	--	--	--	--	163	0	--
30...	75	1105	--	--	--	--	--	163	0	--
30...	125	1055	--	--	--	--	--	163	0	--
30...	175	1005	--	--	--	--	--	163	0	--
30...	225	955	7.8	86	31	100	4.0	163	0	450
30...	275	905	9.2	86	29	98	4.0	159	0	450
30...	285	895	9.0	86	29	95	3.0	160	0	450
30...	325	855	--	--	--	--	--	160	0	--
30...	375	805	--	--	--	--	--	160	0	--
30...	425	755	10	85	29	95	3.0	161	0	450
30...	458	722	--	--	--	--	--	161	0	--

09421000 LAKE MEAD AT HOOVER DAM, ARIZ.-NEV.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1940 to current year.

REMARKS.--Samples collected by Bureau of Reclamation and analyzed by the Metropolitan Water District of Southern California, LaVerne, Calif.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
NOV.										
13...	93	.78	711	.97	340	220	2.6	1120	7.6	19.5
13...	93	--	--	--	--	--	--	1120	8.0	19.5
13...	91	--	--	--	--	--	--	1120	8.0	19.5
13...	91	--	--	--	--	--	--	1120	7.9	19.5
13...	89	1.9	698	.95	340	210	2.4	1110	7.8	15.0
13...	88	--	--	--	--	--	--	1100	7.8	13.5
13...	83	--	--	--	--	--	--	1060	7.8	13.0
13...	82	1.4	667	.91	330	200	2.4	1060	7.8	12.0
13...	83	1.4	668	.91	330	200	2.4	1060	7.8	12.0
13...	83	--	--	--	--	--	--	1060	7.8	12.0
13...	83	--	--	--	--	--	--	1060	7.8	12.0
13...	84	1.0	680	.92	330	200	2.4	1080	7.7	12.0
13...	85	--	--	--	--	--	--	1090	7.6	12.0
20...	92	1.0	714	.97	340	220	2.6	1130	7.5	17.0
20...	92	--	--	--	--	--	--	1130	7.9	17.0
20...	91	--	--	--	--	--	--	1130	7.9	17.0
20...	90	--	--	--	--	--	--	1130	7.9	17.0
20...	90	.70	720	.98	340	220	2.6	1130	7.9	16.5
20...	87	1.7	695	.95	340	210	2.4	1100	7.9	14.0
20...	82	1.7	676	.92	330	200	2.4	1080	7.9	13.0
20...	80	--	--	--	--	--	--	1050	7.9	12.0
20...	80	1.3	663	.90	330	200	2.3	1050	7.9	12.0
20...	81	--	--	--	--	--	--	1050	7.8	12.0
20...	82	--	--	--	--	--	--	1060	7.7	12.0
20...	82	1.4	667	.91	330	200	2.3	1060	7.8	12.0
20...	83	--	--	--	--	--	--	1060	7.8	12.0
DEC.										
27...	90	1.0	725	.99	340	220	2.6	1120	8.1	14.5
27...	90	--	--	--	--	--	--	1120	8.3	14.5
27...	90	--	--	--	--	--	--	1120	8.1	14.5
27...	90	--	--	--	--	--	--	1120	8.2	14.5
27...	90	1.1	725	.99	340	220	2.6	1120	8.1	14.5
27...	84	1.3	683	.93	340	210	2.4	1080	8.3	13.5
27...	82	1.4	678	.92	330	200	2.4	1060	8.2	13.0
27...	80	--	--	--	--	--	--	1050	8.0	12.0
27...	80	1.7	666	.91	330	200	2.4	1050	8.0	12.0
27...	80	--	--	--	--	--	--	1050	8.3	12.0
27...	78	--	--	--	--	--	--	1060	8.3	12.0
27...	82	1.9	681	.93	330	200	2.4	1070	8.0	12.0
27...	82	--	--	--	--	--	--	1070	7.7	12.0
JAN.										
30...	88	.20	692	.94	340	210	2.4	1180	7.9	13.0
30...	88	--	--	--	--	--	--	1180	7.6	13.0
30...	88	--	--	--	--	--	--	1180	7.3	13.0
30...	87	--	--	--	--	--	--	1180	7.4	13.0
30...	88	--	--	--	--	--	--	1180	7.5	13.0
30...	88	--	--	--	--	--	--	1180	7.5	13.0
30...	87	.20	691	.94	340	220	2.4	1180	7.5	13.0
30...	82	.80	677	.92	330	200	2.3	1070	7.4	12.0
30...	81	.60	672	.91	330	200	2.3	1070	7.5	12.0
30...	80	--	--	--	--	--	--	1070	7.6	12.0
30...	80	--	--	--	--	--	--	1050	7.5	12.0
30...	80	.70	662	.90	330	200	2.3	1060	7.6	12.0
30...	80	--	--	--	--	--	--	1070	7.6	12.0

09421000 LAKE MEAD AT HOOVER DAM, ARIZ.-NEV.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	DEPTH (FT)	ELEVATION ABOVE MEAN SEA LEVEL (FT)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	B.CARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
MAR.										
04...	.0	1176	8.2	85	30	100	4.0	146	0	310
04...	10	1168	--	--	--	--	--	153	0	--
04...	25	1153	--	--	--	--	--	154	0	--
04...	75	1103	--	--	--	--	--	154	0	--
04...	125	1053	8.2	87	30	100	4.0	154	0	300
04...	175	1003	--	--	--	--	--	154	0	--
04...	225	953	8.2	87	30	100	4.0	154	0	300
04...	275	903	8.5	87	30	100	4.0	157	0	300
04...	325	853	--	--	--	--	--	157	0	--
04...	375	803	--	--	--	--	--	157	0	--
04...	425	753	8.7	87	30	100	4.0	157	0	290
04...	455	723	--	--	--	--	--	159	0	--
29...	.0	1175	8.5	87	30	100	4.0	154	0	300
29...	10	1165	--	--	--	--	--	154	0	--
29...	25	1150	8.5	87	29	100	4.0	154	0	300
29...	75	1100	--	--	--	--	--	154	0	--
29...	125	1050	--	--	--	--	--	154	0	--
29...	175	1000	--	--	--	--	--	154	0	--
29...	225	950	8.2	87	29	100	4.0	155	0	300
29...	265	910	8.0	87	29	100	4.0	156	0	300
29...	275	900	--	--	--	--	--	156	0	--
29...	325	850	--	--	--	--	--	156	0	--
29...	375	800	--	--	--	--	--	156	0	--
29...	425	750	8.0	87	29	100	4.0	157	0	290
29...	452	723	--	--	--	--	--	157	0	--
APR.										
29...	.0	1172	6.4	88	30	100	4.0	155	0	310
29...	10	1162	--	--	--	--	--	155	0	--
29...	25	1147	--	--	--	--	--	155	0	--
29...	75	1097	--	--	--	--	--	155	0	--
29...	125	1047	7.2	88	29	100	4.0	154	0	300
29...	175	997	--	--	--	--	--	155	0	--
29...	225	947	--	--	--	--	--	156	0	--
29...	262	910	7.4	88	29	100	4.0	156	0	300
29...	275	897	7.2	88	29	98	4.0	156	0	300
29...	325	847	--	--	--	--	--	156	0	--
29...	375	797	--	--	--	--	--	156	0	--
29...	425	747	7.2	88	28	98	4.0	159	0	300
29...	457	715	--	--	--	--	--	157	0	--
MAY										
29...	5.0	1165	6.4	86	30	100	5.0	153	0	300
29...	10	1160	--	--	--	--	--	--	--	--
29...	25	1145	--	--	--	--	--	--	--	--
29...	75	1095	--	--	--	--	--	--	--	--
29...	125	1045	--	--	--	--	--	--	--	--
29...	175	995	--	--	--	--	--	--	--	--
29...	225	945	--	--	--	--	--	--	--	--
29...	260	910	8.0	86	30	100	5.0	156	0	290
29...	275	895	8.0	86	30	100	5.0	156	0	300
29...	325	845	8.0	86	30	100	5.0	157	0	300
29...	375	795	--	--	--	--	--	--	--	--
29...	425	745	8.0	86	30	100	4.0	159	0	290
29...	450	720	--	--	--	--	--	--	--	--

09421000 LAKE MEAD AT HOOVER DAM, ARIZ.-NEV.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
MAR.										
04...	86	.20	695	.95	340	229	2.4	1100	7.2	--
04...	87	--	--	--	--	--	--	1100	7.5	13.0
04...	87	--	--	--	--	--	--	1100	7.4	12.5
04...	85	--	--	--	--	--	--	1100	7.5	12.0
04...	86	.60	692	.94	340	210	2.4	1100	7.5	12.0
04...	86	--	--	--	--	--	--	1100	7.5	12.0
04...	86	.70	692	.94	340	210	2.4	1100	7.5	12.0
04...	85	.40	692	.94	340	210	2.4	1100	7.4	12.0
04...	85	--	--	--	--	--	--	1100	7.4	12.0
04...	85	--	--	--	--	--	--	1100	7.4	12.0
04...	87	.70	685	.93	340	210	2.4	1100	7.4	12.0
04...	86	--	--	--	--	--	--	1100	7.4	12.0
29...	86	1.1	692	.94	340	210	2.4	1090	8.1	14.5
29...	87	--	--	--	--	--	--	1090	8.2	13.5
29...	86	1.2	692	.94	340	210	2.4	1100	8.2	13.5
29...	85	--	--	--	--	--	--	1100	8.2	13.0
29...	85	--	--	--	--	--	--	1100	8.1	12.5
29...	86	--	--	--	--	--	--	1090	8.1	12.0
29...	86	1.4	692	.94	340	210	2.4	1090	8.2	12.0
29...	84	1.3	690	.94	340	210	2.4	1090	8.0	12.0
29...	84	--	--	--	--	--	--	1090	8.0	12.0
29...	84	--	--	--	--	--	--	1090	8.2	12.0
29...	84	--	--	--	--	--	--	1090	8.1	12.0
29...	83	1.4	688	.92	340	210	2.4	1090	7.9	12.0
29...	83	--	--	--	--	--	--	1090	8.2	12.0
APR.										
29...	87	.60	702	.95	340	220	2.3	1100	7.7	18.0
29...	86	--	--	--	--	--	--	1110	7.6	18.0
29...	86	--	--	--	--	--	--	1100	7.6	18.0
29...	86	--	--	--	--	--	--	1100	7.4	14.5
29...	86	.50	691	.94	340	210	2.4	1100	7.4	13.5
29...	86	--	--	--	--	--	--	1100	7.4	13.0
29...	84	--	--	--	--	--	--	1090	7.4	12.5
29...	84	.80	690	.94	340	210	2.4	1090	7.6	12.0
29...	84	.80	688	.94	340	210	2.3	1090	7.4	12.0
29...	84	--	--	--	--	--	--	1090	7.6	12.0
29...	83	--	--	--	--	--	--	1090	7.5	12.0
29...	83	.50	687	.93	340	210	2.3	1100	7.4	12.0
29...	82	--	--	--	--	--	--	1070	7.9	12.0
MAY										
29...	89	.60	692	.94	340	210	2.4	1100	8.1	18.0
29...	88	--	--	--	340	--	--	1100	7.9	18.0
29...	87	--	--	--	340	--	--	1100	7.9	18.0
29...	87	--	--	--	340	--	--	1100	7.7	18.0
29...	86	--	--	--	340	--	--	1100	7.7	15.5
29...	86	--	--	--	340	--	--	1100	7.9	13.5
29...	85	--	--	--	340	--	--	1100	7.6	13.0
29...	85	.80	682	.93	340	210	2.4	1100	7.6	12.0
29...	85	.80	692	.94	340	210	2.4	1100	7.6	12.0
29...	84	1.0	691	.94	340	210	2.4	1080	7.6	12.0
29...	83	--	--	--	340	--	--	1080	7.7	12.0
29...	83	1.0	680	.92	340	210	2.4	1080	7.7	12.0
29...	82	--	--	--	330	--	--	1080	7.7	12.0

09421000 LAKE MEAD AT HOOVER DAM, ARIZ.-NEV.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	DEPTH (FT)	ELEVATION ABOVE MEAN SEA LEVEL (FT)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
JUNE										
27...	.0	1169	6.4	78	30	100	4.0	128	0	310
27...	10	1159	--	--	--	--	--	128	0	--
27...	25	1144	6.4	80	30	100	4.0	135	0	300
27...	75	1094	6.7	86	29	100	4.0	151	0	300
27...	125	1044	--	--	--	--	--	155	0	--
27...	175	994	8.5	88	29	100	4.0	155	0	300
27...	225	944	--	--	--	--	--	155	0	--
27...	260	909	8.5	88	28	98	4.0	156	0	290
27...	275	894	--	--	--	--	--	156	0	--
27...	325	844	--	--	--	--	--	156	0	--
27...	375	794	--	--	--	--	--	156	0	--
27...	425	744	8.5	88	28	98	4.0	157	0	290
27...	451	718	--	--	--	--	--	157	0	--
JULY										
30...	.0	1172	5.7	79	30	100	5.0	129	0	300
30...	10	1162	--	--	--	--	--	129	0	--
30...	25	1147	--	--	--	--	--	131	0	--
30...	75	1097	--	--	--	--	--	151	0	--
30...	125	1047	7.2	88	29	100	5.0	155	0	300
30...	175	997	--	--	--	--	--	155	0	--
30...	225	947	--	--	--	--	--	157	0	--
30...	260	912	8.0	87	29	99	5.0	157	0	290
30...	275	897	7.6	87	29	99	4.0	157	0	290
30...	325	847	--	--	--	--	--	--	0	--
30...	375	797	--	--	--	--	--	157	0	--
30...	425	747	8.0	88	29	98	4.0	159	0	290
30...	451	721	--	--	--	--	--	159	5	--
AUG.										
27...	.0	1173	5.2	76	31	110	4.0	118	0	320
27...	10	1163	--	--	--	--	--	117	0	--
27...	25	1148	5.2	78	30	110	4.0	122	0	310
27...	75	1098	5.4	86	30	100	4.0	150	0	300
27...	125	1048	--	--	--	--	--	153	0	--
27...	175	998	--	--	--	--	--	155	0	--
27...	225	948	6.8	87	28	100	5.0	157	0	300
27...	262	911	--	--	--	--	--	157	0	--
27...	275	898	6.8	87	28	100	5.0	157	0	290
27...	325	848	--	--	--	--	--	157	0	--
27...	375	798	--	--	--	--	--	157	0	--
27...	425	748	7.2	87	28	100	4.0	159	0	300
27...	453	720	--	--	--	--	--	160	0	--
SEP.										
26...	.0	1174	6.4	77	32	100	5.0	120	0	310
26...	10	1164	--	--	--	--	--	--	--	--
26...	25	1149	--	--	--	--	--	120	0	--
26...	75	1099	6.4	84	30	98	4.0	153	0	300
26...	125	1049	--	--	--	--	--	153	0	--
26...	175	999	7.2	87	30	98	4.0	156	0	300
26...	225	949	8.0	86	30	98	4.0	159	0	290
26...	262	912	7.6	86	30	98	4.0	159	0	290
26...	275	899	--	--	--	--	--	159	0	--
26...	325	849	--	--	--	--	--	--	--	--
26...	375	799	--	--	--	--	--	159	0	--
26...	425	749	7.6	86	30	97	4.0	159	0	290
26...	453	721	--	--	--	--	--	159	0	--

09421000 LAKE MEAD AT HOOVER DAM, ARIZ.-NEV.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
JUNE										
27...	88	.20	680	.92	320	210	2.4	1080	8.0	29.0
27...	87	--	--	--	--	--	--	1080	8.0	28.0
27...	87	.40	674	.92	320	210	2.4	1080	7.8	25.0
27...	87	.80	688	.94	330	210	2.4	1090	7.8	19.0
27...	87	--	--	--	--	--	--	1090	7.8	15.5
27...	87	1.2	694	.94	340	210	2.4	1090	8.1	13.5
27...	85	--	--	--	--	--	--	1080	7.8	12.0
27...	85	1.3	680	.92	340	210	2.3	1080	7.8	12.0
27...	84	--	--	--	--	--	--	1080	7.8	12.0
27...	84	--	--	--	--	--	--	1080	7.7	12.0
27...	84	--	--	--	--	--	--	1080	7.7	12.0
27...	84	1.5	679	.92	340	210	2.3	1080	7.8	12.0
27...	83	--	--	--	--	--	--	1080	7.8	12.0
JULY										
30...	90	.10	673	.92	320	220	2.4	1090	7.6	26.0
30...	90	--	--	--	--	--	--	1090	7.6	26.0
30...	89	--	--	--	--	--	--	1090	7.6	25.5
30...	87	--	--	--	--	--	--	1090	7.5	19.5
30...	87	.60	693	.94	340	210	2.4	1090	7.5	15.0
30...	87	--	--	--	--	--	--	1090	7.4	14.0
30...	85	--	--	--	--	--	--	1090	7.4	13.0
30...	85	.70	681	.93	340	210	2.3	1090	7.4	13.0
30...	84	2.0	680	.92	340	210	2.3	1080	7.5	12.0
30...	--	--	--	--	--	--	--	1090	7.5	12.0
30...	85	--	--	--	--	--	--	1080	7.4	12.0
30...	85	2.0	682	.93	340	210	2.3	1080	7.4	12.0
30...	85	--	--	--	--	--	--	1070	8.4	12.0
AUG.										
27...	92	.40	697	.95	320	220	2.7	1090	7.9	30.5
27...	92	--	--	--	--	--	--	1100	7.8	30.5
27...	90	.40	688	.94	320	220	2.7	1100	7.7	29.0
27...	87	1.0	687	.93	340	220	2.4	1100	7.6	21.5
27...	87	--	--	--	--	--	--	1100	7.6	18.0
27...	86	--	--	--	--	--	--	1100	7.5	15.5
27...	83	1.2	688	.94	330	200	2.4	1080	7.4	14.0
27...	82	--	--	--	--	--	--	1070	7.4	--
27...	83	1.2	678	.92	330	200	2.4	1070	7.4	--
27...	82	--	--	--	--	--	--	1070	7.5	--
27...	83	--	--	--	--	--	--	1080	7.4	--
27...	84	1.0	690	.94	330	200	2.4	1080	7.5	--
27...	83	--	--	--	--	--	--	1070	7.6	--
SEP.										
26...	91	.00	681	.93	320	230	2.4	1100	7.8	28.0
26...	91	--	--	--	--	--	--	1100	7.7	28.0
26...	91	--	--	--	--	--	--	1100	7.7	26.5
26...	85	.50	683	.93	330	210	2.3	1100	7.6	24.0
26...	86	--	--	--	--	--	--	1100	7.7	18.0
26...	86	.30	689	.94	340	210	2.3	1100	7.6	15.0
26...	83	.60	678	.92	340	210	2.3	1090	7.6	13.5
26...	82	.60	677	.92	340	210	2.3	1070	7.6	13.0
26...	82	--	--	--	--	--	--	1070	7.6	12.0
26...	82	--	--	--	--	--	--	1070	7.6	12.0
26...	82	--	--	--	--	--	--	1070	7.5	12.0
26...	82	.40	675	.92	340	210	2.3	1070	7.4	12.0
26...	83	--	--	--	--	--	--	1070	7.6	12.0

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DEPTH (FT)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)
NOV.										
28...	1000	10	.23	.00	.27	.09	.24	.33	--	.01
MAR.										
04...	1215	10	.40	.00	.40	.03	.22	.25	--	.02
MAY										
29...	1009	10	.22	.01	.23	.08	.27	.35	--	.02
AUG.										
27...	0857	10	.00	.00	.00	.04	.39	.43	.01	.01

09421500 COLORADO RIVER BELOW HOOVER DAM, ARIZ.-NEV.

LOCATION.--Lat 36°00'55", long 114°44'16", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, Mohave County, Ariz., or in SW¼NE¼ sec.29, T.22 S., R.65 E., Mount Diablo meridian, Clark County, Nev., 0.3 mi (0.5 km) downstream from gaging station in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--167,800 mi^2 (434,600 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1939 to current year.
Water temperatures: October 1941 to September 1957.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT.									
16...	0945	15500	9.0	10	84	28	110	4.8	166
NOV.									
19...	1340	11090	9.4	0	80	27	100	4.8	162
DEC.									
20...	1000	14600	9.6	10	85	28	100	4.8	162
JAN.									
16...	1450	2800	9.1	10	84	28	100	5.3	155
FEB.									
15...	1200	21300	8.8	10	87	29	100	5.5	154
MAR.									
26...	1530	25800	8.8	0	86	29	100	5.3	156
APR.									
17...	1300	32600	8.8	20	90	29	100	4.6	158
MAY									
21...	1530	27150	9.0	20	87	29	99	5.6	160
JUNE									
13...	1215	30250	9.0	0	87	29	100	4.6	160
JULY									
17...	1450	30000	9.4	20	88	29	100	4.8	160
AUG.									
19...	1405	25400	9.4	20	87	29	100	5.5	162
SEP.									
25...	1430	30000	9.3	50	80	29	98	4.8	163

09421500 COLORADO RIVER BELOW HOOVER DAM, ARIZ.-NEV.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.									
16...	0	290	85	.5	.68	.23	170	697	697
NOV.									
19...	0	300	82	.3	.55	.03	120	700	686
DEC.									
20...	0	270	87	.6	.57	.03	120	707	668
JAN.									
16...	0	300	88	.4	.54	.02	130	719	694
FEB.									
15...	0	310	86	.3	.44	.02	140	708	705
MAR.									
26...	0	310	87	.8	.43	.03	140	726	706
APR.									
17...	0	300	88	.5	.39	.02	160	730	701
MAY									
21...	0	300	85	.3	.45	.01	140	722	696
JUNE									
13...	0	290	83	.3	.38	.01	140	731	684
JULY									
17...	0	290	85	.3	.36	.02	140	710	687
AUG.									
19...	0	290	86	.3	.41	.01	130	715	689
SEP.									
25...	--	270	80	.3	.30	.00	--	714	653

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
OCT.								
16...	.95	330	190	2.7	1080	8.0	11.5	--
NOV.								
19...	.95	310	180	2.5	1080	7.9	10.5	--
DEC.								
20...	.96	330	190	2.4	1080	8.0	11.5	--
JAN.								
16...	.98	330	200	2.4	1110	7.6	12.0	10.2
FEB.								
15...	.96	346	210	2.4	1100	7.9	10.5	--
MAR.								
26...	.99	330	210	2.4	1110	8.0	10.5	--
APR.								
17...	.99	340	210	2.3	1100	7.9	12.0	--
MAY								
21...	.98	340	210	2.3	1120	7.8	12.0	--
JUNE								
13...	.99	340	210	2.4	1110	8.0	12.0	--
JULY								
17...	.97	340	210	2.4	1090	7.7	12.0	--
AUG.								
19...	.97	340	200	2.4	1090	7.4	13.0	--
SEP.								
25...	.97	320	190	2.4	1080	--	13.0	--

09423000 COLORADO RIVER BELOW DAVIS DAM, ARIZ.-NEV.

LOCATION.--Lat 35°11'30", long 114°34'17", in SE¼NE¼ sec.1, T.32 S., R.66 E., Mount Diablo meridian, in Nevada, Clark County, at gaging station on right bank 0.5 mi (0.8 km) downstream from Davis Dam, 29 mi (47 km) west of Kingman, Ariz., and 68 mi (109 km) downstream from Hoover Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	1135	19380	10	[illegible]	82	29	110	5.1	147	0	330	90
NOV.												
01...	0745	4730	9.1	10	82	29	110	5.6	148	0	290	92
DEC.												
17...	1330	14230	9.5	10	83	30	110	5.1	152	0	290	91
FEB.												
01...	0730	20110	9.1	0	87	29	100	5.1	157	0	310	91
MAR.												
01...	0840	15630	9.1	10	86	30	100	5.2	160	0	300	88
APR.												
04...	0930	19490	8.8	10	86	29	110	4.9	159	0	300	86
MAY												
01...	0745	13610	5.9	20	88	29	100	5.0	157	0	310	88
JUNE												
03...	1230	19420	7.2	20	87	29	100	4.9	158	0	300	86
JULY												
01...	1530	24549	8.5	80	86	28	100	5.5	156	0	290	87
AUG.												
01...	0850	13710	9.2	0	86	30	100	5.7	155	--	300	91
SEP.												
03...	1140	19450	9.1	30	87	29	100	4.8	154	--	290	88

09423000 COLORADO RIVER BELOW DAVIS DAM, ARIZ.-NEV.--Continued

DRAINAGE AREA.--169,300 mi^2 (438,500 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
01...	.3	.23	150	736	730	1.00	320	200	2.7	1110	7.9	19.0
NOV.												
01...	.3	.20	150	716	692	.97	320	200	2.7	1110	8.2	17.0
DEC.												
17...	.4	.32	130	731	696	.99	330	210	2.6	1110	8.1	11.5
FEB.												
01...	.3	.32	140	718	710	.98	340	210	2.4	1090	8.1	9.0
MAR.												
01...	.4	.30	130	720	699	.98	340	210	2.4	1110	8.2	10.0
APR.												
04...	.4	.28	140	734	705	1.00	330	200	2.6	1110	8.2	14.0
MAY												
01...	.4	.23	140	727	705	.99	340	210	2.4	1120	8.0	16.0
JUNE												
03...	.3	.23	140	726	693	.99	340	210	2.4	1120	8.0	18.0
JULY												
01...	.3	.28	150	717	684	.98	330	200	2.4	1104	7.8	18.5
AUG.												
01...	.4	.28	140	716	700	.97	340	210	2.4	1100	--	18.0
SEP.												
03...	.3	.25	140	727	685	.99	340	210	2.4	1100	--	16.0

09424000 COLORADO RIVER NEAR TOPOCK, ARIZ.

LOCATION.--Lat 34°41'15", long 114°27'43", in SW¼NW¼ sec.13, T.15 N., R.21 W., Mohave County, at gaging station on left bank in Mohave Canyon, 2.7 mi (4.3 km) downstream from Topock, 39.5 mi (63.6 km) upstream from Parker Dam, and 49 mi (79 km) downstream from Davis Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
02...	0820	12800	11	50	83	29	110	5.2	148	0	310	90
NOV.												
05...	1200	5900	9.4	20	85	29	110	5.6	155	0	290	92
DEC.												
18...	1125	9850	9.3	20	83	29	100	5.1	152	0	300	92
FEB.												
01...	1230	11610	8.9	30	86	30	100	5.3	154	0	300	89
MAR.												
01...	1600	8490	8.9	20	87	29	100	5.4	161	0	290	89
APR.												
04...	1100	14150	8.6	110	85	30	110	4.9	160	0	300	90
MAY												
01...	1135	16750	7.1	20	88	29	100	4.9	159	0	300	88
JUNE												
03...	1430	13000	7.1	20	89	30	100	4.8	157	0	300	86
JULY												
01...	1220	15550	8.5	30	85	29	100	5.8	157	0	300	88
AUG.												
01...	1405	15680	8.8	10	85	29	100	5.7	153	--	300	90
SEP.												
03...	0910	14090	9.1	20	85	28	100	4.7	155	--	270	90

09424000 COLORADO RIVER NEAR TOPOCK, ARIZ.--Continued

DRAINAGE AREA.--172,300 mi^2 (446,300 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: August 1969 to current year.
Water temperatures: July 1952 to July 1962.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
02...	.3	.28	140	696	713	.97	330	210	2.6	1090	8.0	20.0
NOV.												
05...	.4	.33	140	694	699	.94	330	200	2.6	1110	8.1	17.0
DEC.												
10...	.4	.28	130	732	695	1.00	330	200	2.4	1120	8.2	11.0
FEB.												
01...	.3	.30	140	684	697	.93	340	210	2.4	1090	8.2	9.0
MAR.												
01...	.3	.28	120	694	690	.94	340	200	2.4	1110	8.2	10.5
APR.												
04...	.5	.25	140	694	709	.94	340	200	2.6	1120	8.2	14.5
MAY												
01...	.3	.21	140	700	697	.95	340	210	2.4	1130	8.0	17.0
JUNE												
03...	.5	.23	140	700	696	.95	350	220	2.3	1130	8.1	18.0
JULY												
01...	.3	.28	140	694	695	.94	330	200	2.4	1110	7.9	19.5
[illegible]												
[illegible]...	.4	.18	140	702	695	.95	330	210	2.4	1110	--	20.0
[illegible]												
[illegible]...	.4	.27	150	674	665	.92	330	200	2.4	1100	--	17.0

09427520 COLORADO RIVER BELOW PARKER DAM, ARIZ.-CALIF.

LOCATION.--Lat 34°17'44", long 114°08'22", in NW¼NW¼ sec.3, T.2 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, at gaging station at Parker Dam, 13 mi (21 km) northeast of Parker, Ariz., and 14 mi (23 km) upstream from Headgate Rock Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	0820	4570	10	10	80	30	110	4.8	143	0	320	93
10...	0900	--	--	--	--	--	--	--	--	--	--	--
17...	0820	--	--	--	--	--	--	--	--	--	--	--
24...	0830	--	--	--	--	--	--	--	--	--	--	--
NOV.												
05...	1300	4850	10	10	88	30	110	5.6	158	0	300	96
12...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
03...	--	6390	10	20	86	30	110	5.3	156	0	300	95
10...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
28...	0945	4550	9.5	10	85	29	110	4.9	156	0	310	91
JAN.												
07...	0815	--	--	--	--	--	--	--	--	--	--	--
14...	0830	--	--	--	--	--	--	--	--	--	--	--
21...	0830	--	--	--	--	--	--	--	--	--	--	--
28...	0830	--	--	--	--	--	--	--	--	--	--	--
FEB.												
04...	0830	4270	9.0	20	85	30	110	6.0	155	0	310	93
11...	0820	--	--	--	--	--	--	--	--	--	--	--
19...	0750	--	--	--	--	--	--	--	--	--	--	--
25...	0845	--	--	--	--	--	--	--	--	--	--	--
MAR.												
04...	0800	9800	9.0	0	86	30	110	5.6	157	0	310	94
11...	0900	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
APR.												
01...	0755	13400	8.8	10	86	29	100	4.8	154	0	310	91
08...	0740	--	--	--	--	--	--	--	--	--	--	--
15...	0800	--	--	--	--	--	--	--	--	--	--	--
22...	0800	--	--	--	--	--	--	--	--	--	--	--
29...	0905	18600	10	40	93	30	110	5.3	173	0	310	92
MAY												
06...	0830	--	--	--	--	--	--	--	--	--	--	--
13...	0840	--	--	--	--	--	--	--	--	--	--	--
20...	0830	--	--	--	--	--	--	--	--	--	--	--
28...	0800	--	--	--	--	--	--	--	--	--	--	--
JUNE												
03...	0830	11700	6.7	20	87	30	110	4.5	158	0	300	90
10...	0830	--	--	--	--	--	--	--	--	--	--	--
17...	0900	--	--	--	--	--	--	--	--	--	--	--
24...	0830	--	--	--	--	--	--	--	--	--	--	--
JULY												
01...	0830	18600	8.0	10	85	29	110	5.0	159	0	310	90
08...	0830	--	--	--	--	--	--	--	--	--	--	--
15...	0830	--	--	--	--	--	--	--	--	--	--	--
22...	0800	--	--	--	--	--	--	--	--	--	--	--
29...	0830	--	--	--	--	--	--	--	--	--	--	--
AUG.												
05...	0840	18400	8.7	30	81	30	110	5.8	144	0	290	91
12...	0830	--	--	--	--	--	--	--	--	--	--	--
19...	0830	--	--	--	--	--	--	--	--	--	--	--
26...	0805	--	--	--	--	--	--	--	--	--	--	--
SEP.												
03...	0830	9310	9.1	20	78	30	90	5.4	150	--	280	87
09...	0820	--	--	--	--	--	--	--	--	--	--	--
16...	0810	--	--	--	--	--	--	--	--	--	--	--
23...	0815	--	--	--	--	--	--	--	--	--	--	--
30...	0830	6640	8.8	20	82	28	100	5.5	145	--	300	88

09427520 COLORADO RIVER BELOW PARKER DAM, ARIZ.-CALIF.--Continued

DRAINAGE AREA.--178,800 mi^2 (463,100 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1963 to current year.
Water temperatures: February 1954 to August 1970.
Prior to October 1968, published as 09428000.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
01...	.4	.23	190	700	720	.98	320	210	2.7	1100	7.9	--
10...	--	--	--	696	--	.95	--	--	--	1100	--	--
17...	--	--	--	702	--	.95	--	--	--	1100	--	--
24...	--	--	--	712	--	.97	--	--	--	1120	--	--
NOV.												
05...	.3	.63	130	718	721	.98	340	210	2.6	1130	7.8	--
12...	--	--	--	718	--	.98	--	--	--	1130	--	--
19...	--	--	--	712	--	.97	--	--	--	1120	--	--
26...	--	--	--	696	--	.95	--	--	--	1120	--	--
DEC.												
03...	.4	.54	140	714	716	.97	340	210	2.5	1130	7.6	--
10...	--	--	--	714	--	.97	--	--	--	1130	--	--
17...	--	--	--	706	--	.96	--	--	--	1120	--	--
28...	.4	.29	140	706	718	.96	330	200	2.6	1120	8.0	--
JAN.												
07...	--	--	--	714	--	.97	--	--	--	1120	--	--
14...	--	--	--	712	--	.97	--	--	--	1120	--	--
21...	--	--	--	710	--	.97	--	--	--	1120	--	--
28...	--	--	--	714	--	.97	--	--	--	1120	--	--
FEB.												
04...	.4	.44	130	720	722	.98	340	210	2.6	1130	8.1	--
11...	--	--	--	724	--	.98	--	--	--	1130	--	--
19...	--	--	--	710	--	.97	--	--	--	1120	--	--
25...	--	--	--	702	--	.95	--	--	--	1120	--	--
MAR.												
04...	.2	.26	120	700	723	.95	340	210	2.6	1120	8.0	--
11...	--	--	--	698	--	.95	--	--	--	1110	--	--
25...	--	--	--	696	--	.95	--	--	--	1100	--	--
APR.												
01...	.4	.40	140	704	708	.96	330	210	2.4	1110	8.0	--
08...	--	--	--	710	--	.97	--	--	--	1110	--	--
15...	--	--	--	710	--	.97	--	--	--	1120	--	--
22...	--	--	--	718	--	.98	--	--	--	1120	--	--
29...	.5	.43	150	748	738	1.02	360	210	2.5	1160	7.4	16.5
MAY												
06...	--	--	--	712	--	.97	--	--	--	1120	--	--
13...	--	--	--	708	--	.96	--	--	--	1110	--	--
20...	--	--	--	704	--	.96	--	--	--	1120	--	--
28...	--	--	--	716	--	.97	--	--	--	1120	--	--
JUNE												
03...	.2	.21	140	716	707	.97	340	210	2.6	1120	8.1	--
10...	--	--	--	708	--	.96	--	--	--	1120	--	--
17...	--	--	--	706	--	.96	--	--	--	1110	--	24.5
24...	--	--	--	696	--	.95	--	--	--	1100	--	--
JULY												
01...	.3	.20	140	708	717	.96	330	200	2.6	1110	8.0	--
08...	--	--	--	698	--	.95	--	--	--	1100	--	--
15...	--	--	--	698	--	.95	--	--	--	1100	--	--
22...	--	--	--	704	--	.96	--	--	--	1100	--	--
29...	--	--	--	692	--	.94	--	--	--	1090	--	--
AUG.												
05...	.3	.14	130	696	689	.95	330	210	2.7	1090	8.0	--
12...	--	--	--	696	--	.95	--	--	--	1090	--	--
19...	--	--	--	696	--	.95	--	--	--	1090	--	--
26...	--	--	--	686	--	.93	--	--	--	1090	--	--
SEP.												
03...	.3	.18	170	696	655	.95	320	200	2.2	1090	--	--
09...	--	--	--	690	--	.94	--	--	--	1090	--	--
16...	--	--	--	690	--	.94	--	--	--	1090	--	--
23...	--	--	--	696	--	.95	--	--	--	1090	--	--
30...	.3	.10	400	692	685	.94	320	200	2.4	1090	--	--

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	FECAL COLI-FORM (COL. PER 100 ML)	DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	FECAL COLI-FORM (COL. PER 100 ML)
OCT.				JAN.			
17...	1115	--	<1	17...	1050	--	<1
NOV.				FEB.			
13...	1145	4650	<1	12...	1150	8930	<1
DEC.				MAR.			
18...	1140	--	<1	26...	1140	18300	<1

DIVERSIONS AND RETURN FLOWS BETWEEN PARKER DAM AND PALO VERDE DAM

09428500 COLORADO RIVER INDIAN RESERVATION MAIN CANAL NEAR PARKER, ARIZ.

LOCATION.--Lat 34°10'04", long 114°16'15", in SE¼NW¼ sec.12, T.11 N., R.19 W., Yuma County, at pumping station on Arizona end of Headgate Rock Dam, on Colorado River Indian Reservation, 1.7 mi (2.7 km) downstream of Parker, and 14 mi (23 km) downstream from Parker Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	Instantaneous discharge (cfs)	Silica, dissolved (mg/L)	Iron, dissolved (mg/L)	Manganese, dissolved (mg/L)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium, dissolved (mg/L)	Potassium, dissolved (mg/L)	Alkalinity as $CaCO_3$ (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
OCT.													
01	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
09	[illegible]	--	--	--	--	--	--	--	--	--	[illegible]	[illegible]	[illegible]
15	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
22	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
29	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
NOV.													
05	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
19	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
26	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
DEC.													
03	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
19	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
26	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN.													
01	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
08	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
FEB.													
09	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
19	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
25	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
MAR.													
09	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
18	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
25	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
APR.													
01	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
08	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
15	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
22	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
29	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAY													
06	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
13	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
20	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
28	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN.													
03	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
10	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
17	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
24	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
JULY													
01	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
08	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
15	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
22	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
29	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
AUG.													
03	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
19	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
26	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
SEPT.													
03	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
09	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
16	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
23	[illegible]	--	--	--	--	--	--	--	--	--	--	--	--
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

09426500 COLORADO RIVER INDIAN RESERVATION MAIN CANAL NEAR PARKER, ARIZ.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.

REMARKS.--No flow Jan. 5-17. Unpublished miscellaneous chemical analyses for water years 1962-63 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CaCO3) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.												
16	.8	.13	210	786	725	.99	330	210	2.5	1110	8.0	25.0
17	--	--	--	736	--	1.00	--	--	--	1130	--	21.5
17	--	--	--	710	--	.97	--	--	--	1120	--	24.0
18	--	--	--	726	--	.98	--	--	--	1130	--	21.5
18	--	--	--	716	--	.97	--	--	--	1125	--	22.0
NOV.												
19	.6	.20	110	714	711	.97	320	200	2.5	1130	8.2	18.0
20	--	--	--	726	--	.99	--	--	--	1140	--	20.5
19	--	--	--	716	--	.97	--	--	--	1130	--	15.5
19	--	--	--	710	--	.97	--	--	--	1130	--	15.5
DEC.												
18	.8	.26	130	760	761	1.01	360	200	2.5	1170	8.0	13.5
21	--	--	--	718	--	.98	--	--	--	1130	--	15.5
18	--	--	--	730	--	.99	--	--	--	1150	--	12.0
19	.8	.29	130	716	722	.97	330	200	2.5	1130	8.1	12.0
JAN.												
21	--	--	--	716	--	.96	--	--	--	1130	--	18.5
17	--	--	--	716	--	.97	--	--	--	1120	--	12.0
FEB.												
18	.7	.27	120	710	726	.97	340	210	2.5	1120	8.1	9.5
21	--	--	--	726	--	.99	--	--	--	1130	--	8.5
19	--	--	--	726	--	.99	--	--	--	1130	--	11.0
17	--	--	--	712	--	.97	--	--	--	1130	--	10.5
MAR.												
19	.5	.19	100	700	721	.95	320	200	2.5	1120	8.1	14.0
21	--	--	--	702	--	.95	--	--	--	1110	--	15.5
19	--	--	--	722	--	.98	--	--	--	1160	--	15.5
19	--	--	--	716	--	.97	--	--	--	1130	--	18.0
APR.												
16	.8	.59	140	722	723	.98	340	210	2.5	1130	7.8	18.5
19	--	--	--	730	--	.99	--	--	--	1140	--	19.0
21	--	--	--	716	--	.98	--	--	--	1130	--	18.5
21	--	--	--	722	--	.98	--	--	--	1140	--	18.5
19	.8	.18	150	718	713	.97	350	220	2.5	1140	8.1	19.5
JUN.												
19	--	--	--	716	--	.97	--	--	--	1170	--	28.0
17	--	--	--	708	--	.96	--	--	--	1160	--	29.5
21	--	--	--	716	--	.97	--	--	--	1130	--	19.5
19	.8	.20	120	716	712	.97	340	210	2.5	1130	7.8	28.5
JUL.												
19	--	--	--	716	--	.98	--	--	--	1130	--	28.5
21	--	--	--	710	--	.97	--	--	--	1170	--	28.0
17	--	--	--	710	--	.97	--	--	--	1170	--	29.5
19	--	--	--	712	--	.97	--	--	--	1170	--	29.0
AUG.												
16	.8	.19	140	698	731	.98	350	220	2.3	1110	8.0	28.5
18	--	--	--	718	--	.97	--	--	--	1140	--	28.0
21	--	--	--	712	--	.97	--	--	--	1130	--	29.5
18	--	--	--	716	--	.97	--	--	--	1120	--	27.0
19	--	--	--	704	--	.96	--	--	--	1100	--	27.0
SEPT.												
19	.8	1.0	140	700	699	.95	320	210	2.5	1100	7.7	28.5
20	--	--	--	704	--	.95	--	--	--	1110	--	29.0
19	--	--	--	720	--	.96	--	--	--	1100	--	29.5
19	--	--	--	712	--	.97	--	--	--	1130	--	29.5
OCT.												
15	.8	.92	180	712	693	.97	320	210	2.5	1120	--	29.0
18	--	--	--	722	--	.97	--	--	--	1135	--	29.5
19	--	--	--	736	--	1.00	--	--	--	1160	--	29.5
19	--	--	--	728	--	.98	--	--	--	1110	--	29.0
21	.8	.83	250	728	698	.96	320	200	2.5	1110	--	29.0

09428510 COLORADO RIVER INDIAN RESERVATION POSTON WASTEWAY NEAR POSTON, ARIZ.
(Formerly published as Poston wasteway near Poston, Ariz.)

LOCATION.--Lat 33°59'58", long 114°26'41", in SW¼SE¼ sec.28, T.8 N., R.21 W., Yuma County, at gaging station 0.8 mi (1.3 km) upstream from mouth, 2.5 mi (4.0 km) west of Poston, and 14 mi (23 km) southwest of Parker.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Time	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
01...	1155	15	50	110	30	150	5.2	200	0	440	130	.4
09...	0930	--	--	--	--	--	--	--	--	--	--	--
15...	1230	--	--	--	--	--	--	--	--	--	--	--
23...	1115	--	--	--	--	--	--	--	--	--	--	--
29...	0930	--	--	--	--	--	--	--	--	--	--	--
NOV.												
05...	1155	12	10	100	35	150	5.0	190	0	370	130	.3
12...	0930	--	--	--	--	--	--	--	--	--	--	--
19...	1050	--	--	--	--	--	--	--	--	--	--	--
26...	0945	--	--	--	--	--	--	--	--	--	--	--
DEC.												
03...	0915	20	120	150	40	220	6.1	203	0	500	200	.5
10...	1245	--	--	--	--	--	--	--	--	--	--	--
18...	1000	--	--	--	--	--	--	--	--	--	--	--
26...	0935	14	10	120	30	160	5.5	219	6	420	140	.5
JAN.												
07...	1300	--	--	--	--	--	--	--	--	--	--	--
14...	1100	--	--	--	--	--	--	--	--	--	--	--
21...	1200	--	--	--	--	--	--	--	--	--	--	--
28...	1215	--	--	--	--	--	--	--	--	--	--	--
FEB.												
04...	0945	12	10	110	37	150	6.4	200	0	400	130	.4
11...	0930	--	--	--	--	--	--	--	--	--	--	--
19...	0800	--	--	--	--	--	--	--	--	--	--	--
25...	1100	--	--	--	--	--	--	--	--	--	--	--
MAR.												
04...	0945	13	10	120	37	160	5.8	210	0	430	140	.4
11...	0930	--	--	--	--	--	--	--	--	--	--	--
18...	0900	--	--	--	--	--	--	--	--	--	--	--
APR.												
01...	0945	14	120	110	35	150	5.0	217	0	390	130	1.0
08...	0900	--	--	--	--	--	--	--	--	--	--	--
15...	0800	--	--	--	--	--	--	--	--	--	--	--
22...	1100	--	--	--	--	--	--	--	--	--	--	--
29...	0815	14	140	120	40	150	5.7	220	0	420	140	.5
MAY												
06...	0800	--	--	--	--	--	--	--	--	--	--	--
13...	0730	--	--	--	--	--	--	--	--	--	--	--
20...	0845	--	--	--	--	--	--	--	--	--	--	--
28...	0820	14	10	130	41	160	5.1	235	0	420	140	.4
JUN												
03...	1130	--	--	--	--	--	--	--	--	--	--	--
10...	0900	--	--	--	--	--	--	--	--	--	--	--
17...	0820	--	--	--	--	--	--	--	--	--	--	--
24...	0745	--	--	--	--	--	--	--	--	--	--	--
JUL.												
01...	0900	16	--	130	45	160	5.5	260	0	470	140	.5
08...	0800	--	--	--	--	--	--	--	--	--	--	--
15...	0730	--	--	--	--	--	--	--	--	--	--	--
22...	0830	--	--	--	--	--	--	--	--	--	--	--
29...	0900	--	--	--	--	--	--	--	--	--	--	--
AUG.												
05...	0745	11	10	95	35	140	4.7	170	0	350	120	.4
12...	0730	--	--	--	--	--	--	--	--	--	--	--
19...	0900	--	--	--	--	--	--	--	--	--	--	--
26...	0730	--	--	--	--	--	--	--	--	--	--	--
SEP.												
03...	0730	15	25	130	45	170	5.3	220	--	420	140	.4
09...	0815	--	--	--	--	--	--	--	--	--	--	--
16...	0900	--	--	--	--	--	--	--	--	--	--	--
23...	0815	--	--	--	--	--	--	--	--	--	--	--
30...	0830	15	20	130	41	160	5.0	220	--	410	140	.4

09428510 COLORADO RIVER INDIAN RESERVATION POSTON WASTEWAY NEAR POSTON, ARIZ.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1965-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NITRITE PLUS NITRATE (N) (MG/L)	NITROGEN AMMONIA (N) (MG/L)	SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CaCO3) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.											
01...	.19	.20	990	980	1.34	430	270	3.1	1400	8.0	23.0
07...	--	--	970	--	1.33	--	--	--	1400	--	21.0
13...	--	--	950	--	1.30	--	--	--	1490	--	20.0
21...	--	--	940	--	1.31	--	--	--	1400	--	21.0
27...	--	--	850	--	1.16	--	--	--	1300	--	19.5
NOV.											
03...	.20	.10	890	890	1.21	390	240	3.3	1300	8.1	16.5
12...	--	--	1150	--	1.56	--	--	--	1700	--	19.0
19...	--	--	960	--	1.31	--	--	--	1450	--	15.0
27...	--	--	790	--	1.08	--	--	--	1270	--	14.0
DEC.											
03...	.36	.60	1200	1350	1.70	570	340	4.1	1900	7.9	13.0
10...	--	--	872	--	1.19	--	--	--	1320	--	14.5
18...	--	--	1200	--	1.63	--	--	--	1830	--	13.0
28...	.29	190	970	1010	1.32	460	290	3.3	1510	8.0	13.5
JAN.											
07...	--	--	1100	--	1.50	--	--	--	1600	--	10.5
14...	--	--	1200	--	1.63	--	--	--	1900	--	15.0
21...	--	--	1190	--	1.62	--	--	--	1790	--	12.0
29...	--	--	1300	--	1.77	--	--	--	1950	--	11.5
FEB.											
04...	.30	1.0	950	900	1.30	430	290	3.2	1400	8.1	8.5
11...	--	--	882	--	1.20	--	--	--	1390	--	7.0
19...	--	--	1170	--	1.59	--	--	--	1570	--	14.0
25...	--	--	890	--	1.21	--	--	--	1290	--	9.5
MAR.											
04...	.23	100	930	1010	1.26	450	290	3.3	1400	7.8	13.0
11...	--	--	870	--	1.17	--	--	--	1280	--	14.0
18...	--	--	970	--	1.30	--	--	--	1500	--	17.0
APR.											
01...	.27	290	1010	900	1.37	460	290	3.1	1490	8.0	16.5
08...	--	--	1100	--	1.50	--	--	--	1740	--	16.5
15...	--	--	870	--	1.18	--	--	--	1280	--	16.0
22...	--	--	1120	--	1.52	--	--	--	1670	--	20.5
29...	.22	220	1020	1020	1.39	480	290	3.2	1570	8.0	18.5
MAY											
06...	--	--	1030	--	1.40	--	--	--	1670	--	18.5
13...	--	--	1060	--	1.44	--	--	--	1560	--	19.0
20...	--	--	890	--	1.20	--	--	--	1410	--	19.0
28...	.21	210	1050	1030	1.43	490	300	3.1	1500	7.9	19.0
JUN.											
03...	--	--	1130	--	1.54	--	--	--	1670	--	24.0
10...	--	--	880	--	1.19	--	--	--	1300	--	24.0
17...	--	--	970	--	1.31	--	--	--	1400	--	25.5
24...	--	--	820	--	1.12	--	--	--	1240	--	25.5
JUL.											
01...	.20	290	1170	1150	1.59	520	310	3.5	1700	7.9	2.5
08...	--	--	1190	--	1.62	--	--	--	1850	--	--
15...	--	--	1020	--	1.39	--	--	--	1500	--	26.0
22...	--	--	882	--	1.20	--	--	--	1300	--	25.5
29...	--	--	1110	--	1.51	--	--	--	1600	--	25.5
AUG.											
05...	.21	180	820	850	1.11	490	290	3.1	1210	8.0	21.0
12...	--	--	1200	--	1.63	--	--	--	1820	--	25.5
19...	--	--	1020	--	1.39	--	--	--	1500	--	25.0
26...	--	--	910	--	1.24	--	--	--	1400	--	26.5
SEPT.											
03...	.17	250	1090	1010	1.46	460	290	3.3	1620	--	25.5
09...	--	--	1030	--	1.40	--	--	--	1620	--	25.5
18...	--	--	890	--	1.21	--	--	--	1300	--	25.5
23...	--	--	910	--	1.24	--	--	--	1330	--	25.5
30...	.20	230	1010	1010	1.37	470	290	3.2	1570	--	25.5

09429000 PALO VERDE CANAL NEAR BLYTHE, CALIF.

LOCATION.--Lat 33°43'55", long 114°30'40", in NW¼NE¼ sec.19, T.5 S., R.24 E., San Bernardino meridian, Riverside County, at gaging station at canal intake structure on west side of Palo Verde Dam, 10 mi (16 km) northeast of Blythe, and 44 mi (71 km) downstream from Headgate Rock Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
01...	1110	10	10	83	30	110	5.0	144	0	330	97	.4
09...	0745	--	--	--	--	--	--	--	--	--	--	--
15...	1315	--	--	--	--	--	--	--	--	--	--	--
23...	0830	--	--	--	--	--	--	--	--	--	--	--
29...	0800	--	--	--	--	--	--	--	--	--	--	--
NOV.												
05...	1100	9.6	0	89	32	120	5.5	150	0	310	100	.3
12...	0830	--	--	--	--	--	--	--	--	--	--	--
19...	1145	--	--	--	--	--	--	--	--	--	--	--
26...	0945	--	--	--	--	--	--	--	--	--	--	--
DEC.												
03...	0820	10	40	93	31	120	5.6	165	0	330	110	.4
10...	1200	--	--	--	--	--	--	--	--	--	--	--
18...	0900	--	--	--	--	--	--	--	--	--	--	--
26...	0745	9.5	20	86	29	110	5.0	162	0	310	98	.4
JAN.												
08...	1100	--	--	--	--	--	--	--	--	--	--	--
14...	1040	--	--	--	--	--	--	--	--	--	--	--
21...	1040	--	--	--	--	--	--	--	--	--	--	--
28...	1130	--	--	--	--	--	--	--	--	--	--	--
FEB.												
04...	0750	8.9	20	85	30	110	5.1	157	0	320	95	.3
11...	0730	--	--	--	--	--	--	--	--	--	--	--
19...	0730	--	--	--	--	--	--	--	--	--	--	--
25...	1020	--	--	--	--	--	--	--	--	--	--	--
MAR.												
04...	0740	9.2	0	88	30	110	5.2	159	0	330	96	.4
11...	0740	--	--	--	--	--	--	--	--	--	--	--
18...	0815	--	--	--	--	--	--	--	--	--	--	--
25...	0735	--	--	--	--	--	--	--	--	--	--	--
APR.												
01...	0750	8.8	10	88	30	110	5.1	155	0	320	100	.4
08...	0800	--	--	--	--	--	--	--	--	--	--	--
15...	0745	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--
29...	0745	8.1	50	90	31	110	5.4	161	0	320	91	.3
MAY												
06...	0745	--	--	--	--	--	--	--	--	--	--	--
13...	0840	--	--	--	--	--	--	--	--	--	--	--
20...	0900	--	--	--	--	--	--	--	--	--	--	--
28...	0745	8.3	20	88	30	110	5.7	159	0	310	91	.3
JUNE												
03...	1040	--	--	--	--	--	--	--	--	--	--	--
10...	0735	--	--	--	--	--	--	--	--	--	--	--
17...	0735	--	--	--	--	--	--	--	--	--	--	--
24...	0830	--	--	--	--	--	--	--	--	--	--	--
JULY												
01...	0745	8.2	10	85	29	110	5.1	161	0	310	90	.3
08...	0730	--	--	--	--	--	--	--	--	--	--	--
15...	0830	--	--	--	--	--	--	--	--	--	--	--
22...	0745	--	--	--	--	--	--	--	--	--	--	--
29...	0810	--	--	--	--	--	--	--	--	--	--	--
AUG.												
05...	0805	8.8	20	86	29	110	5.6	151	0	290	95	.3
12...	0840	--	--	--	--	--	--	--	--	--	--	--
19...	0705	--	--	--	--	--	--	--	--	--	--	--
26...	0745	--	--	--	--	--	--	--	--	--	--	--
SEP.												
03...	0700	9.3	10	96	28	110	5.7	152	--	290	110	.3
09...	0735	--	--	--	--	--	--	--	--	--	--	--
18...	0715	--	--	--	--	--	--	--	--	--	--	--
23...	0745	--	--	--	--	--	--	--	--	--	--	--
30...	0745	9.6	20	86	29	120	5.8	153	--	310	110	.4

09429000 PALO VERDE CANAL NEAR BLYTHE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: March 1970 to current year.

REMARKS.--No flow Jan. 6-11.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.											
01...	.10	150	728	737	1.00	330	<10	2.6	1120	8.2	24.5
04...	--	--	730	--	1.00	--	--	--	1140	--	22.0
15...	--	--	714	--	.97	--	--	--	1120	--	23.0
23...	--	--	732	--	1.00	--	--	--	1160	--	20.0
29...	--	--	740	--	1.01	--	--	--	1170	--	19.5
NOV.											
05...	.20	120	758	745	1.03	350	<20	2.8	1170	8.3	17.0
12...	--	--	746	--	1.04	--	--	--	1200	--	14.0
19...	--	--	730	--	.99	--	--	--	1140	--	--
26...	--	--	762	--	1.04	--	--	--	1210	--	14.5
DEC.											
03...	.34	140	766	743	1.04	360	<20	2.8	1210	7.9	13.5
10...	--	--	746	--	1.01	--	--	--	1170	--	14.0
18...	--	--	742	--	1.01	--	--	--	1160	--	12.0
26...	.30	130	746	724	1.01	330	<20	2.6	1160	8.1	11.5
JAN.											
08...	--	--	750	--	1.02	--	--	--	1140	--	11.5
14...	--	--	776	--	1.05	--	--	--	1240	--	13.0
21...	--	--	734	--	1.02	--	--	--	1160	--	13.5
28...	--	--	720	--	.98	--	--	--	1140	--	10.5
FEB.											
04...	.28	150	720	734	.98	340	<10	2.6	1130	8.1	7.0
11...	--	--	750	--	1.02	--	--	--	1170	--	6.0
19...	--	--	742	--	1.01	--	--	--	1140	--	11.5
25...	--	--	808	--	1.10	--	--	--	1300	--	10.0
MAR.											
04...	.23	130	712	748	.97	340	<10	2.6	1140	8.1	11.0
11...	--	--	730	--	1.00	--	--	--	1160	--	13.5
18...	--	--	802	--	1.09	--	--	--	1260	--	16.0
25...	--	--	832	--	1.13	--	--	--	1310	--	15.5
APR.											
01...	.55	150	760	741	1.03	340	<20	2.6	1160	7.9	17.0
08...	--	--	728	--	.99	--	--	--	1140	--	17.0
15...	--	--	728	--	.99	--	--	--	1140	--	17.0
22...	--	--	728	--	.99	--	--	--	1140	--	19.0
29...	.23	130	744	736	1.01	350	<20	2.6	1150	8.0	19.5
MAY											
06...	--	--	730	--	.99	--	--	--	1140	--	20.0
13...	--	--	718	--	.97	--	--	--	1140	--	18.5
20...	--	--	720	--	.98	--	--	--	1140	--	19.0
28...	.25	150	720	720	.98	340	<10	2.6	1140	7.9	23.5
JUN.											
03...	--	--	730	--	1.00	--	--	--	1160	--	23.5
10...	--	--	726	--	.99	--	--	--	1140	--	23.5
17...	--	--	728	--	.99	--	--	--	1140	--	25.0
24...	--	--	728	--	.99	--	--	--	1140	--	25.5
JUL.											
01...	.22	160	716	722	.98	320	<20	2.6	1140	8.0	24.5
08...	--	--	742	--	1.01	--	--	--	1160	--	26.0
15...	--	--	728	--	.99	--	--	--	1140	--	27.0
22...	--	--	736	--	1.00	--	--	--	1140	--	28.0
29...	--	--	736	--	1.00	--	--	--	1150	--	28.5
AUG.											
05...	.27	120	708	698	.96	320	<10	2.6	1120	7.9	28.0
12...	--	--	706	--	.96	--	--	--	1110	--	28.5
19...	--	--	708	--	1.02	--	--	--	1160	--	25.0
26...	--	--	706	--	.96	--	--	--	1120	--	26.5
SEP.											
02...	.05	<20	766	722	1.01	260	<20	2.6	1170	--	25.5
09...	--	--	806	--	1.09	--	--	--	1270	--	--
16...	--	--	878	--	1.22	--	--	--	1420	--	23.5
23...	--	--	860	--	1.18	--	--	--	1380	--	25.0
30...	.05	<20	750	750	1.02	320	<10	2.6	1190	--	26.5

DIVERSIONS AND RETURN FLOWS BETWEEN PALO VERDE DAM AND IMPERIAL DAM

09429030 COLORADO RIVER INDIAN RESERVATION LEVEE DRAIN NEAR PARKER, ARIZ.

(Formerly published as Palo Verde drain near Parker, Ariz.)

LOCATION.--Lat 33°45'25", long 114°29'48", in NE¼SW¼ sec.24, T.5 N., R.22 W., Yuma County, at bridge, 0.5 mi (0.8 km) above mouth, 0.5 mi (0.8 km) northeast of Palo Verde Dam, 9 mi (14 km) north of Ehrenberg, and 31 mi (50 km) southwest of Parker.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	1125	--	20	50	150	47	210	5.1	251	0	530	210
07...	0800	--	--	--	--	--	--	--	--	--	--	--
15...	1300	--	--	--	--	--	--	--	--	--	--	--
23...	1040	--	--	--	--	--	--	--	--	--	--	--
29...	0800	--	--	--	--	--	--	--	--	--	--	--
NOV.												
05...	1120	--	22	40	160	48	200	5.4	256	0	520	210
16...	0905	--	--	--	--	--	--	--	--	--	--	--
17...	1130	--	--	--	--	--	--	--	--	--	--	--
28...	0900	--	--	--	--	--	--	--	--	--	--	--
DEC.												
03...	0835	--	23	10	150	47	210	5.5	251	0	520	220
10...	1220	--	--	--	--	--	--	--	--	--	--	--
18...	0930	--	--	--	--	--	--	--	--	--	--	--
28...	0810	--	17	20	160	53	320	6.0	269	0	600	350
JAN.												
08...	1120	--	--	--	--	--	--	--	--	--	--	--
18...	1050	--	--	--	--	--	--	--	--	--	--	--
21...	1130	--	--	--	--	--	--	--	--	--	--	--
28...	1145	--	--	--	--	--	--	--	--	--	--	--
FEB.												
04...	0900	--	22	16	140	43	180	5.7	229	0	480	200
11...	0900	--	--	--	--	--	--	--	--	--	--	--
17...	0800	--	--	--	--	--	--	--	--	--	--	--
25...	1030	--	--	--	--	--	--	--	--	--	--	--
MAR.												
04...	0745	--	22	30	150	46	200	5.2	242	0	510	210
11...	0800	--	--	--	--	--	--	--	--	--	--	--
18...	0845	--	--	--	--	--	--	--	--	--	--	--
25...	0745	--	--	--	--	--	--	--	--	--	--	--
APR.												
01...	0810	--	22	10	140	47	200	4.3	230	0	480	210
08...	0830	--	--	--	--	--	--	--	--	--	--	--
18...	0755	--	--	--	--	--	--	--	--	--	--	--
22...	1045	--	--	--	--	--	--	--	--	--	--	--
29...	0725	--	--	--	--	--	--	--	--	--	--	--
MAY												
06...	0815	--	22	70	160	47	200	4.8	247	0	520	200
13...	0855	--	--	--	--	--	--	--	--	--	--	--
22...	0815	--	--	--	--	--	--	--	--	--	--	--
29...	0745	--	--	--	--	--	--	--	--	--	--	--
JUNE												
03...	1055	--	22	20	150	46	200	4.3	243	0	480	200
10...	0745	--	--	--	--	--	--	--	--	--	--	--
17...	0800	--	--	--	--	--	--	--	--	--	--	--
24...	0710	--	--	--	--	--	--	--	--	--	--	--
JULY												
01...	0800	--	23	30	160	35	200	4.9	252	0	520	210
08...	0745	--	--	--	--	--	--	--	--	--	--	--
15...	0700	--	--	--	--	--	--	--	--	--	--	--
22...	0750	--	--	--	--	--	--	--	--	--	--	--
29...	0720	--	--	--	--	--	--	--	--	--	--	--
AUG.												
05...	0710	--	23	10	160	47	210	4.2	253	0	500	210
12...	0855	--	--	--	--	--	--	--	--	--	--	--
19...	0745	--	--	--	--	--	--	--	--	--	--	--
26...	0720	--	--	--	--	--	--	--	--	--	--	--
SEPT.												
03...	0715	--	20	40	160	48	190	5.7	250	--	480	210
09...	0745	--	--	--	--	--	--	--	--	--	--	--
18...	0725	--	--	--	--	--	--	--	--	--	--	--
23...	0725	--	--	--	--	--	--	--	--	--	--	--
30...	0745	42	25	20	160	45	200	4.3	250	--	500	210

09429030 COLORADO RIVER INDIAN RESERVATION LEVEE DRAIN NEAR PARKER, ARIZ.--Continued

PERIOD OF RECORD.--October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CaCO3) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
01...	.2	.00	200	1230	1300	1.67	50	300	3.8	1890	8.1	21.5
09...	--	--	--	1260	--	1.71	-	--	--	1910	--	19.0
15...	--	--	--	1250	--	1.70	-	--	--	1920	--	21.0
23...	--	--	--	1240	--	1.69	-	--	--	1890	--	20.0
29...	--	--	--	1200	--	1.74	-	--	--	1920	--	18.0
NOV.												
05...	.2	.13	100	1300	1290	1.77	60	390	3.6	1950	8.2	15.5
12...	--	--	--	1300	--	1.77	-	--	--	1950	--	18.5
19...	--	--	--	1320	--	1.80	-	--	--	1990	--	16.5
26...	--	--	--	1350	--	1.84	-	--	--	1970	--	15.0
DEC.												
03...	.6	.16	172	1310	1200	1.78	55	380	3.8	1940	7.9	13.5
10...	--	--	--	1240	--	1.69	-	--	--	1880	--	15.0
18...	--	--	--	1230	--	1.67	-	--	--	1870	--	13.5
28...	.8	.31	430	1060	1060	2.20	60	400	5.6	2520	8.0	14.0
JAN.												
08...	--	--	--	1230	--	1.67	-	--	--	1860	--	16.0
14...	--	--	--	1210	--	1.65	-	--	--	1890	--	15.5
21...	--	--	--	1220	--	1.66	-	--	--	1870	--	18.5
29...	--	--	--	1170	--	1.59	-	--	--	1790	--	13.0
FEB.												
04...	.2	.21	200	1230	1190	1.67	53	390	3.4	1800	7.9	11.5
11...	--	--	--	1230	--	1.67	-	--	--	1810	--	12.0
19...	--	--	--	1230	--	1.67	-	--	--	1820	--	15.0
25...	--	--	--	1210	--	1.65	-	--	--	1860	--	13.5
MAR.												
04...	.5	.17	210	1240	1200	1.69	56	370	3.7	1880	7.7	15.5
11...	--	--	--	1180	--	1.60	-	--	--	1860	--	16.5
18...	--	--	--	1190	--	1.62	-	--	--	1850	--	20.0
25...	--	--	--	1210	--	1.65	-	--	--	1860	--	19.0
APR.												
01...	.3	.27	210	1290	1220	1.75	56	350	3.7	1880	7.9	18.5
08...	--	--	--	1210	--	1.65	-	--	--	1870	--	19.0
15...	--	--	--	1230	--	1.67	-	--	--	1880	--	19.0
22...	--	--	--	1220	--	1.66	-	--	--	1880	--	20.0
29...	.5	.15	210	1220	1200	1.66	56	390	3.6	1890	7.9	--
MAY												
06...	--	--	--	1210	--	1.65	-	--	--	1870	--	20.5
13...	--	--	--	1220	--	1.66	-	--	--	1870	--	19.5
20...	--	--	--	1250	--	1.70	-	--	--	1910	--	19.5
28...	.2	.67	200	1270	1220	1.72	56	360	3.7	1890	7.8	25.5
JUN												
03...	--	--	--	1290	--	1.75	-	--	--	1860	--	25.0
10...	--	--	--	1290	--	1.75	-	--	--	1920	--	24.5
17...	--	--	--	1300	--	1.77	-	--	--	1940	--	26.0
24...	--	--	--	1290	--	1.75	-	--	--	1910	--	26.5
JUL.												
01...	.6	.35	210	1300	1300	1.77	63	420	3.5	1920	8.0	23.5
08...	--	--	--	1310	--	1.79	-	--	--	1910	--	25.5
15...	--	--	--	1300	--	1.76	-	--	--	1930	--	25.5
22...	--	--	--	1300	--	1.77	-	--	--	1950	--	26.5
29...	--	--	--	1310	--	1.78	-	--	--	1950	--	28.0
AUG.												
05...	.6	.13	200	1290	1290	1.76	59	390	3.8	1940	7.9	28.5
12...	--	--	--	1300	--	1.80	-	--	--	1970	--	25.0
19...	--	--	--	1290	--	1.80	-	--	--	2030	--	23.5
26...	--	--	--	1280	--	1.75	-	--	--	1920	--	26.0
SEP.												
03...	.6	.23	200	1290	1250	1.80	60	390	3.8	1970	--	26.5
10...	--	--	--	1280	--	1.80	-	--	--	1980	--	25.5
19...	--	--	--	1270	--	1.75	-	--	--	1980	--	24.5
23...	--	--	--	1280	--	1.75	-	--	--	1980	--	26.0
30...	.6	.25	420	1300	1290	1.80	60	390	3.8	1980	--	23.0

09429060 COLORADO RIVER INDIAN RESERVATION LOWER MAIN DRAIN NEAR PARKER, ARIZ.
(Formerly published as Lower Main drain near Parker, Ariz.)

LOCATION.--Lat 33°45'40", long 114°29'05", in SW¼NW¼ sec.19, T.5 N., R.21 W., Yuma County, at gaging station, 2.8 mi (4.5 km) above outlet to Colorado River, and 31 mi (50 km) south of Parker.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
01...	1130	17	60	130	45	230	5.6	225	0	510	230	.5
07...	0800	--	--	--	--	--	--	--	--	--	--	--
15...	1300	--	--	--	--	--	--	--	--	--	--	--
23...	1030	--	--	--	--	--	--	--	--	--	--	--
29...	0800	--	--	--	--	--	--	--	--	--	--	--
NOV.												
05...	1115	14	20	130	43	230	5.9	218	0	470	230	.5
12...	0830	--	--	--	--	--	--	--	--	--	--	--
19...	1145	--	--	--	--	--	--	--	--	--	--	--
26...	0900	--	--	--	--	--	--	--	--	--	--	--
DEC.												
03...	0845	16	30	140	48	260	6.9	246	0	510	270	.6
10...	1215	--	--	--	--	--	--	--	--	--	--	--
18...	0930	--	--	--	--	--	--	--	--	--	--	--
26...	0800	22	10	150	46	190	4.9	246	0	500	200	.9
JAN.												
08...	1130	--	--	--	--	--	--	--	--	--	--	--
18...	1100	--	--	--	--	--	--	--	--	--	--	--
21...	1115	--	--	--	--	--	--	--	--	--	--	--
28...	1145	--	--	--	--	--	--	--	--	--	--	--
FEB.												
04...	0900	16	20	150	50	310	7.9	255	0	600	330	.7
11...	0800	--	--	--	--	--	--	--	--	--	--	--
19...	0745	--	--	--	--	--	--	--	--	--	--	--
25...	1030	--	--	--	--	--	--	--	--	--	--	--
MAR.												
04...	0900	16	10	150	49	270	6.9	247	0	570	290	.7
11...	0800	--	--	--	--	--	--	--	--	--	--	--
18...	0830	--	--	--	--	--	--	--	--	--	--	--
25...	0730	--	--	--	--	--	--	--	--	--	--	--
APR.												
01...	0905	16	30	140	52	250	6.1	266	0	520	260	.9
08...	0825	--	--	--	--	--	--	--	--	--	--	--
15...	0905	--	--	--	--	--	--	--	--	--	--	--
22...	1030	--	--	--	--	--	--	--	--	--	--	--
29...	0740	18	20	140	58	310	6.6	278	0	510	330	.7
MAY												
06...	0800	--	--	--	--	--	--	--	--	--	--	--
13...	0700	--	--	--	--	--	--	--	--	--	--	--
20...	0800	--	--	--	--	--	--	--	--	--	--	--
28...	0750	18	20	150	52	270	5.7	255	0	560	290	.7
JUN.												
03...	1100	--	--	--	--	--	--	--	--	--	--	--
10...	0750	--	--	--	--	--	--	--	--	--	--	--
17...	0750	--	--	--	--	--	--	--	--	--	--	--
24...	0715	--	--	--	--	--	--	--	--	--	--	--
JUL.												
01...	0700	18	20	160	50	310	6.2	287	0	590	320	.8
08...	0705	--	--	--	--	--	--	--	--	--	--	--
15...	0710	--	--	--	--	--	--	--	--	--	--	--
22...	0800	--	--	--	--	--	--	--	--	--	--	--
29...	0700	--	--	--	--	--	--	--	--	--	--	--
AUG.												
05...	0700	17	110	150	50	290	6.6	276	0	520	290	.8
12...	0700	--	--	--	--	--	--	--	--	--	--	--
19...	0705	--	--	--	--	--	--	--	--	--	--	--
26...	0710	--	--	--	--	--	--	--	--	--	--	--
SEP.												
03...	0705	17	20	150	50	320	7.2	261	--	580	270	.8
09...	0700	--	--	--	--	--	--	--	--	--	--	--
19...	0705	--	--	--	--	--	--	--	--	--	--	--
26...	0700	--	--	--	--	--	--	--	--	--	--	--
30...	0700	18	20	160	48	330	6.7	260	--	600	290	.8

09429060 COLORADO RIVER INDIAN RESERVATION LOWER MAIN DRAIN NEAR PARKER, ARIZ.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITROGEN (N) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NON-CAR-BONATE HARDNESS (MG/L)	SODIUM AD-SORPTION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPERA-TURE (DEG C)
OCT.											
01...	.20	310	1250	1280	1.70	510	330	4.4	1910	8.1	23.5
14...	--	--	1230	--	1.67	--	--	--	1810	--	20.5
15...	--	--	1140	--	1.55	--	--	--	1770	--	22.0
21...	--	--	1400	--	1.90	--	--	--	2140	--	21.0
29...	--	--	1290	--	1.75	--	--	--	1930	--	20.5
NOV.											
05...	.48	490	1240	1240	1.84	500	320	4.5	1920	8.0	16.0
12...	--	--	1150	--	1.56	--	--	--	1790	--	20.0
19...	--	--	1270	--	1.73	--	--	--	1950	--	16.0
26...	--	--	1486	--	2.01	--	--	--	2200	--	17.0
DEC.											
03...	.58	580	1400	1340	1.90	550	350	4.8	2130	7.9	14.5
10...	--	--	1300	--	1.77	--	--	--	2150	--	10.0
18...	--	--	1410	--	2.19	--	--	--	2430	--	14.5
27...	.15	150	1230	1240	1.67	560	350	3.5	1870	7.8	13.5
JAN.											
07...	--	--	1490	--	2.57	--	--	--	3080	--	16.5
14...	--	--	1490	--	2.09	--	--	--	3100	--	17.0
21...	--	--	1750	--	2.38	--	--	--	2710	--	17.0
28...	--	--	1380	--	1.92	--	--	--	2030	--	14.5
FEB.											
18...	.33	340	1570	1590	2.14	580	370	3.8	2420	8.0	11.5
11...	--	--	1390	--	1.89	--	--	--	2060	--	10.0
19...	--	--	1240	--	1.75	--	--	--	1905	--	13.5
25...	--	--	1300	--	1.95	--	--	--	2060	--	14.5
MAR.											
04...	1.0	120	1430	1400	1.94	560	370	4.0	2210	7.7	14.5
11...	--	--	1170	--	1.62	--	--	--	1900	--	17.0
18...	--	--	1520	--	2.07	--	--	--	2370	--	19.0
25...	--	--	1500	--	2.04	--	--	--	2410	--	19.5
APR.											
01...	.50	100	1470	1280	2.00	560	350	4.5	2170	8.0	19.5
08...	--	--	1520	--	2.00	--	--	--	2350	--	20.5
15...	--	--	1170	--	1.54	--	--	--	1610	--	--
22...	--	--	1300	--	1.65	--	--	--	2060	--	21.0
29...	.62	150	1500	1530	2.13	620	400	5.0	2450	7.5	20.0
MAY											
06...	--	--	1300	--	1.95	--	--	--	2120	--	21.0
13...	--	--	1200	--	1.71	--	--	--	1960	--	20.5
20...	--	--	1300	--	1.95	--	--	--	2100	--	20.5
27...	.80	850	1500	1600	2.00	590	370	4.0	2240	7.8	--
JUN.											
03...	--	--	1520	--	2.00	--	--	--	2360	--	20.5
10...	--	--	1140	--	1.55	--	--	--	1790	--	20.0
17...	--	--	1510	--	2.07	--	--	--	2240	--	21.0
24...	--	--	1570	--	2.11	--	--	--	2320	--	20.5
JUL.											
15...	.29	300	1400	1400	2.10	540	370	4.5	2420	8.0	20.5
22...	--	--	1390	--	1.88	--	--	--	2120	--	20.0
29...	--	--	1230	--	1.67	--	--	--	1800	--	20.5
AUG.											
05...	--	--	1280	--	1.74	--	--	--	1900	--	20.5
12...	--	--	1330	--	1.81	--	--	--	2040	--	20.5
19...	--	--	1300	--	1.76	--	--	--	1900	--	20.5
26...	--	--	1310	--	1.78	--	--	--	1900	--	20.5
SEPT.											
09...	.66	860	1500	1430	1.96	600	370	4.0	2270	7.8	20.0
16...	--	--	1570	--	2.14	--	--	--	2370	--	20.0
23...	--	--	1490	--	1.73	--	--	--	1940	--	20.0
30...	--	--	1300	--	1.81	--	--	--	2000	--	20.0
30...	.50	460	1600	1300	1.87	610	390	4.0	2100	--	20.0
30...	--	--	1300	--	1.82	--	--	--	1900	--	21.0
30...	--	--	1470	--	1.79	--	--	--	1800	--	20.0
30...	--	--	1400	--	1.87	--	--	--	1900	--	20.0
30...	.60	660	1470	1300	1.88	600	390	4.0	2000	--	20.0

09429130 PALO VERDE IRRIGATION DISTRICT OLIVE LAKE DRAIN NEAR BLYTHE, CALIF.

LOCATION.--Lat 33°40'36", long 114°32'09", in SW¼SW¼ sec.1, T.6 S., R.23 E., San Bernardino meridian, Riverside County, 0.3 mi (0.5 km) upstream from mouth, and 5 mi (8 km) northeast of Blythe.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	1025	22	21	50	190	43	160	5.9	295	0	430	140
NOV.												
01...	0915	15	19	50	180	40	160	6.8	290	0	350	120
DEC.												
17...	1450	11	19	20	190	42	160	5.9	296	0	450	150
JAN.												
02...	1630	11	19	0	190	43	160	5.8	290	0	460	150
FEB.												
06...	1130	6.4	18	10	190	43	160	6.4	301	0	480	150
MAR.												
01...	1450	7.5	18	20	190	42	170	6.5	295	0	440	140
APR.												
04...	0845	9.0	14	40	120	30	140	5.2	246	0	370	120
MAY												
01...	0900	14	14	20	190	44	150	5.7	293	0	390	140
JUNE												
03...	0855	15	16	30	140	42	150	5.6	281	0	410	130
JULY												
01...	1100	19	13	10	120	36	140	6.5	235	0	370	120
AUG.												
01...	0835	19	18	10	140	38	150	7.0	292	--	430	130
SEP.												
03...	0830	20	19	20	140	41	150	5.6	295	--	390	140

09429130 PALO VERDE IRRIGATION DISTRICT OLIVE LAKE DRAIN NEAR BLYTHE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1970 (partial-record station), October 1970 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
01...	.4	.24	210	1130	1100	1.50	550	310	3.0	1640	8.0	22.0
NOV.												
01...	.3	.27	210	1090	944	1.48	410	170	3.4	1630	7.9	17.0
DEC.												
17...	.4	.38	180	1140	1130	1.55	550	300	3.0	1660	8.0	15.0
JAN.												
02...	.3	.23	200	1130	1140	1.54	550	310	3.0	1670	8.0	12.0
FEB.												
06...	.3	.20	200	1130	1140	1.54	550	300	3.0	1670	7.9	14.5
MAR.												
01...	.4	.23	180	1140	1110	1.55	550	310	3.2	1670	8.1	20.5
APR.												
04...	.5	.11	180	950	930	1.29	460	250	2.9	1380	7.9	16.0
MAY												
01...	.4	.04	190	1120	1040	1.52	560	320	2.8	1670	7.7	26.0
JUNE												
03...	.3	.09	200	1030	1030	1.40	520	290	2.9	1500	7.7	22.0
JULY												
01...	.4	.11	170	928	922	1.26	450	260	2.9	1430	7.8	26.0
AUG.												
01...	.4	.16	200	1070	1060	1.46	510	270	2.9	1600	--	23.0
SEP.												
03...	.3	.20	260	1070	1030	1.46	520	200	2.9	1610	--	22.5

09429188 COLORADO RIVER AT TAYLOR FERRY, NEAR BLYTHE, CALIF.

LOCATION.--Lat 33°26'03", long 114°37'35", in SE¼ sec.36, T.8 S., R.22 E., San Bernardino meridian, Riverside County, at gaging station, at site of old Taylor Ferry, 2.5 mi (4.0 km) upstream from Cibola Bridge, 12 mi (19 km) south of Blythe, Calif., 28 mi (45 km) downstream from Palo Verde Dam, and 62 mi (100 km) upstream from Imperial Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Time	Instantaneous Discharge (CFS)	Dissolved Silica (SiO2) (MG/L)	Dissolved Iron (FE) (UG/L)	Dissolved Calcium (CA) (MG/L)	Dissolved Magnesium (MG) (MG/L)	Dissolved Sodium (NA) (MG/L)	Dissolved Potassium (K) (MG/L)	Bicarbonate (HCO3) (MG/L)	Carbonate (CO3) (MG/L)	Dissolved Sulfate (SO4) (MG/L)	Dissolved Chloride (CL) (MG/L)
OCT.												
01...	1010	7080	10	10	84	31	120	5.0	148	0	330	100
09...	1110	--	--	--	--	--	--	--	--	--	--	--
15...	1010	--	--	--	--	--	--	--	--	--	--	--
23...	0910	--	--	--	--	--	--	--	--	--	--	--
29...	1115	--	--	--	--	--	--	--	--	--	--	--
NOV.												
05...	0710	4000	11	10	94	33	130	5.5	175	0	340	120
14...	1210	--	--	--	--	--	--	--	--	--	--	--
19...	1230	--	--	--	--	--	--	--	--	--	--	--
26...	1245	--	--	--	--	--	--	--	--	--	--	--
DEC.												
03...	1215	3040	11	40	98	33	130	5.5	180	0	360	120
10...	0945	--	--	--	--	--	--	--	--	--	--	--
18...	1300	--	--	--	--	--	--	--	--	--	--	--
27...	1315	4380	9.9	10	89	31	120	5.0	168	0	330	110
JAN.												
08...	0910	--	--	--	--	--	--	--	--	--	--	--
15...	0935	--	--	--	--	--	--	--	--	--	--	--
21...	0900	--	--	--	--	--	--	--	--	--	--	--
28...	0915	--	--	--	--	--	--	--	--	--	--	--
FEB.												
04...	1140	6880	9.9	10	87	31	120	5.8	161	0	330	100
11...	1130	--	--	--	--	--	--	--	--	--	--	--
19...	1115	--	--	--	--	--	--	--	--	--	--	--
25...	0800	--	--	--	--	--	--	--	--	--	--	--
MAR.												
04...	1110	7470	9.6	10	95	31	120	5.3	167	0	350	110
11...	1120	--	--	--	--	--	--	--	--	--	--	--
18...	1200	--	--	--	--	--	--	--	--	--	--	--
25...	1120	--	--	--	--	--	--	--	--	--	--	--
APR.												
01...	1135	12440	9.0	10	89	30	110	4.8	161	0	310	98
08...	0710	--	--	--	--	--	--	--	--	--	--	--
15...	1115	--	--	--	--	--	--	--	--	--	--	--
22...	0720	--	--	--	--	--	--	--	--	--	--	--
29...	1140	11120	8.6	6	92	32	120	5.3	170	0	320	98
MAY												
05...	1145	--	--	--	--	--	--	--	--	--	--	--
13...	1140	--	--	--	--	--	--	--	--	--	--	--
20...	1145	--	--	--	--	--	--	--	--	--	--	--
29...	0900	12800	7.8	40	92	31	110	4.7	160	0	320	100
JUN.												
03...	0910	--	--	--	--	--	--	--	--	--	--	--
10...	1120	--	--	--	--	--	--	--	--	--	--	--
17...	1135	--	--	--	--	--	--	--	--	--	--	--
24...	1120	--	--	--	--	--	--	--	--	--	--	--
JUL.												
01...	1140	12900	8.8	12	88	31	110	5.2	164	0	320	98
08...	1120	--	--	--	--	--	--	--	--	--	--	--
15...	1045	--	--	--	--	--	--	--	--	--	--	--
22...	1135	--	--	--	--	--	--	--	--	--	--	--
29...	1050	--	--	--	--	--	--	--	--	--	--	--
AUG.												
05...	1030	11900	8.8	20	88	30	110	5.0	159	0	300	97
12...	1025	--	--	--	--	--	--	--	--	--	--	--
19...	1100	--	--	--	--	--	--	--	--	--	--	--
26...	1055	--	--	--	--	--	--	--	--	--	--	--
SEP.												
03...	1045	10500	8.9	60	92	29	120	5.0	162	--	320	120
09...	1130	--	--	--	--	--	--	--	--	--	--	--
18...	1100	--	--	--	--	--	--	--	--	--	--	--
23...	1100	--	--	--	--	--	--	--	--	--	--	--
30...	1100	9470	10	60	93	30	110	5.8	165	--	320	100

09429188 COLORADO RIVER AT TAYLOR FERRY, NEAR BLYTHE, CALIF.--Continued

DRAINAGE AREA.--183,700 mi^2 (475,800 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: April 1970 to current year.

REMARKS.--Gaging station operated by Bureau of Reclamation.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED AMMON-IA (N) (MG/L)	DIS-SOLVED SOLIDS-RESI-DUE AT 180 C (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CaCO3) (MG/L)	NON-CARB-ONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
01xxx	.9	.10	190	764	756	1.03	360	269	2.8	1180	8.2	24.0
02xxx	--	--	--	782	--	1.06	--	--	--	1200	--	22.0
03xxx	--	--	--	742	--	1.01	--	--	--	1140	--	21.0
04xxx	--	--	--	758	--	1.03	--	--	--	1190	--	21.0
05xxx	--	--	--	766	--	1.04	--	--	--	1230	--	20.0
NOV.												
06xxx	.3	.21	130	808	821	1.09	370	220	2.9	1270	8.3	15.5
07xxx	--	--	--	782	--	1.06	--	--	--	1240	--	20.0
08xxx	--	--	--	770	--	1.05	--	--	--	1220	--	20.5
09xxx	--	--	--	830	--	1.14	--	--	--	1310	--	14.5
DEC.												
10xxx	.9	.20	140	822	848	1.12	390	230	2.9	1290	8.1	11.5
11xxx	--	--	--	790	--	1.09	--	--	--	1220	--	14.5
12xxx	--	--	--	758	--	1.03	--	--	--	1210	--	11.5
13xxx	.9	.24	150	770	780	1.05	390	210	2.8	1200	8.1	12.0
JAN.												
14xxx	--	--	--	826	--	1.12	--	--	--	1300	--	11.5
15xxx	--	--	--	838	--	1.24	--	--	--	1370	--	12.0
16xxx	--	--	--	770	--	1.06	--	--	--	1210	--	13.0
17xxx	--	--	--	730	--	1.00	--	--	--	1150	--	9.0
FEB.												
18xxx	.8	.27	165	784	784	1.06	390	210	2.8	1190	8.2	9.0
19xxx	--	--	--	784	--	1.06	--	--	--	1190	--	8.5
20xxx	--	--	--	762	--	1.04	--	--	--	1160	--	10.0
21xxx	--	--	--	726	--	.98	--	--	--	1100	--	8.5
MAR.												
22xxx	.5	.22	150	750	835	1.02	390	230	2.7	1200	8.1	13.0
23xxx	--	--	--	788	--	1.06	--	--	--	1200	--	14.0
24xxx	--	--	--	740	--	1.01	--	--	--	1180	--	17.0
25xxx	--	--	--	744	--	1.01	--	--	--	1160	--	17.0
APR.												
26xxx	.9	.28	140	748	732	1.02	350	210	2.8	1190	8.1	18.0
27xxx	--	--	--	754	--	1.03	--	--	--	1170	--	18.0
28xxx	--	--	--	748	--	1.02	--	--	--	1170	--	18.5
29xxx	--	--	--	754	--	1.03	--	--	--	1180	--	19.0
30xxx	.9	.22	170	774	761	1.05	360	220	2.7	1200	8.0	20.0
MAY												
01xxx	--	--	--	772	--	1.05	--	--	--	1210	--	19.0
02xxx	--	--	--	776	--	1.06	--	--	--	1200	--	19.5
03xxx	--	--	--	766	--	1.04	--	--	--	1210	--	19.5
04xxx	.9	.23	150	764	750	1.04	360	220	2.7	1200	8.0	20.0
JUN.												
05xxx	--	--	--	762	--	1.04	--	--	--	1200	--	20.0
06xxx	--	--	--	754	--	1.03	--	--	--	1200	--	20.0
07xxx	--	--	--	768	--	1.04	--	--	--	1190	--	20.5
08xxx	--	--	--	764	--	1.03	--	--	--	1170	--	20.0
JUL.												
09xxx	.3	.20	160	764	761	1.03	360	210	2.8	1170	8.1	20.0
10xxx	--	--	--	734	--	1.00	--	--	--	1150	--	20.5
11xxx	--	--	--	730	--	.99	--	--	--	1150	--	21.0
12xxx	--	--	--	750	--	1.02	--	--	--	1170	--	20.5
13xxx	--	--	--	742	--	1.01	--	--	--	1160	--	20.5
AUG.												
14xxx	.3	.29	160	724	722	1.00	350	200	2.9	1150	7.9	20.0
15xxx	--	--	--	738	--	1.00	--	--	--	1160	--	20.5
16xxx	--	--	--	736	--	1.00	--	--	--	1160	--	20.0
17xxx	--	--	--	732	--	1.00	--	--	--	1170	--	20.5
SEP.												
18xxx	.3	.36	180	744	700	1.01	350	200	2.8	1220	--	20.0
19xxx	--	--	--	758	--	1.03	--	--	--	1190	--	20.0
20xxx	--	--	--	758	--	1.03	--	--	--	1190	--	20.5
21xxx	--	--	--	756	--	1.03	--	--	--	1190	--	20.5
22xxx	.6	.16	260	762	762	1.04	360	220	2.5	1200	--	20.5

[illegible]

LOCATION.--Lat [illegible], Long [illegible], in [illegible] sec. [illegible], T. [illegible] N., R. [illegible] E., [illegible] County, at gaging station, on State Highway [illegible] bridge, [illegible] mi [illegible] upstream from mouth, and [illegible] mi [illegible] south of Palo Verde.

CHEMICAL ANALYSES, WATER YEAR [illegible] TO SEPTEMBER [illegible]

DATE	TIME	[illegible] (00300) MG/L	[illegible] (00915) MG/L	[illegible] (00930) MG/L	[illegible] (00940) MG/L	[illegible] (00945) MG/L	[illegible] (00950) MG/L	[illegible] (00955) MG/L	[illegible] (00960) MG/L	[illegible] (00965) MG/L	[illegible] (00970) MG/L	[illegible] (00971) MG/L
[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

09429220 PALO VERDE IRRIGATION DISTRICT OUTFALL DRAIN NEAR PALO VERDE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water year 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
01...	1.2	.81	610	1750	1850	2.52	540	270	7.9	2780	8.0	22.0
09...	--	--	--	1770	--	2.41	--	--	--	2770	--	22.0
15...	--	--	--	1660	--	2.26	--	--	--	2660	--	23.0
23...	--	--	--	1740	--	2.37	--	--	--	2780	--	22.0
29...	--	--	--	1700	--	2.31	--	--	--	2710	--	21.0
NOV.												
05...	1.0	.52	470	1790	1820	2.43	540	270	7.9	2830	8.3	18.0
12...	--	--	--	1690	--	2.30	--	--	--	2650	--	22.0
19...	--	--	--	1760	--	2.39	--	--	--	2790	--	17.0
26...	--	--	--	1800	--	2.45	--	--	--	2780	--	15.5
DEC.												
03...	1.2	.55	530	1700	1800	2.31	540	270	7.7	2770	8.0	14.5
10...	--	--	--	1860	--	2.53	--	--	--	2810	--	15.5
16...	--	--	--	1740	--	2.37	--	--	--	2780	--	16.5
27...	1.2	.49	620	1940	1940	2.64	560	290	8.3	3000	8.0	14.0
JAN.												
08...	--	--	--	1820	--	2.48	--	--	--	2890	--	15.0
14...	--	--	--	2020	--	2.75	--	--	--	3270	--	15.0
21...	--	--	--	1830	--	2.49	--	--	--	2940	--	18.0
28...	--	--	--	1780	--	2.42	--	--	--	2910	--	12.0
FEB.												
04...	1.2	.48	610	1890	1900	2.57	530	270	8.5	2900	8.1	14.0
11...	--	--	--	1750	--	2.38	--	--	--	2750	--	14.0
19...	--	--	--	1930	--	2.62	--	--	--	2960	--	18.0
25...	--	--	--	1740	--	2.37	--	--	--	2750	--	12.0
MAR.												
04...	1.1	.67	610	1770	1860	2.41	540	280	7.9	2820	7.9	16.5
11...	--	--	--	1680	--	2.28	--	--	--	2670	--	18.0
18...	--	--	--	1590	--	2.16	--	--	--	2640	--	20.5
25...	--	--	--	1700	--	2.31	--	--	--	2710	--	20.5
APR.												
01...	1.1	.68	570	1760	1800	2.39	530	270	7.7	2770	7.9	20.5
08...	--	--	--	1710	--	2.33	--	--	--	2760	--	20.5
15...	--	--	--	1710	--	2.33	--	--	--	2750	--	23.0
22...	--	--	--	1780	--	2.42	--	--	--	2790	--	20.5
29...	1.2	.43	550	1650	1710	2.24	530	270	7.4	2670	8.0	21.5
MAY												
06...	--	--	--	1490	--	2.03	--	--	--	2500	--	--
13...	--	--	--	1700	--	2.31	--	--	--	2730	--	21.5
20...	--	--	--	1760	--	2.39	--	--	--	2820	--	21.0
29...	1.3	.40	610	1940	1870	2.64	560	300	7.9	2940	7.9	28.5
JUNE												
03...	--	--	--	1630	--	2.22	--	--	--	2580	--	26.5
10...	--	--	--	1790	--	2.43	--	--	--	2850	--	26.5
17...	--	--	--	1770	--	2.41	--	--	--	2730	--	28.5
24...	--	--	--	1700	--	2.31	--	--	--	2630	--	29.0
JULY												
01...	1.2	.38	590	1780	1810	2.46	530	260	8.1	2800	8.0	26.5
08...	--	--	--	1680	--	2.28	--	--	--	2590	--	26.0
15...	--	--	--	1710	--	2.33	--	--	--	2710	--	26.5
22...	--	--	--	1720	--	2.34	--	--	--	2710	--	29.5
29...	--	--	--	1650	--	2.24	--	--	--	2630	--	30.0
AUG.												
05...	1.2	2.6	590	1830	1760	2.49	540	270	7.6	2800	8.0	30.5
12...	--	--	--	1770	--	2.41	--	--	--	2740	--	28.5
19...	--	--	--	1550	--	2.11	--	--	--	2560	--	26.5
26...	--	--	--	1680	--	2.28	--	--	--	2690	--	27.0
SEP.												
03...	1.1	.51	560	1640	1630	2.23	510	260	7.1	2590	--	28.0
09...	--	--	--	1530	--	2.08	--	--	--	2450	--	26.0
18...	--	--	--	1650	--	2.24	--	--	--	2570	--	26.5
23...	--	--	--	1600	--	2.18	--	--	--	2510	--	26.5
30...	1.1	1.0	690	1660	1660	2.26	530	260	6.8	2570	--	26.0

09429225 PALO VERDE IRRIGATION DISTRICT ANDERSON DRAIN NEAR PALO VERDE, CALIF.
(Formerly published as Anderson drain near Palo Verde, Calif.)

LOCATION.--Lat 33°21'19", long 114°43'00", in SW¼ sec.36, T.9 S., R.21 E., San Bernardino meridian, Imperial County, 0.1 mi (0.2 km) upstream from pump into Outfall drain, and 5.5 mi (8.8 km) south of Palo Verde.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	1410	2.0	28	40	110	55	1100	6.5	592	0	970	1000
NOV.												
01...	1500	2.0	24	110	54	25	820	5.7	571	0	720	560
DEC.												
06...	1500	1.3	23	50	130	58	750	7.3	576	0	940	550
JAN.												
02...	1520	1.5	20	10	81	35	710	6.0	551	0	720	520
FEB.												
05...	1610	1.3	23	40	110	45	620	7.2	561	0	740	410
MAR.												
01...	1345	1.2	15	40	130	48	440	6.6	385	0	680	370
APR.												
03...	1600	1.2	23	130	61	26	690	4.3	538	0	670	410
MAY												
01...	1345	2.2	21	30	53	24	670	3.8	543	0	720	410
JUNE												
03...	1415	2.2	24	220	45	22	690	3.7	545	0	640	370
JULY												
01...	1405	1.6	25	50	93	58	780	13	542	0	780	500
AUG.												
01...	1510	1.9	26	250	120	50	470	11	425	--	650	350
SEP.												
03...	1515	.80	26	170	18	28	680	4.4	538	--	610	410

09429225 PALO VERDE IRRIGATION DISTRICT ANDERSON DRAIN NEAR PALO VERDE, CALIF.--Continued

PERIOD OF RECORD.--Chemical analyses: Water year 1969 (partial-record station), October 1969 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1966-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
01...	2.0	.48	2200	3630	3570	4.86	500	16	21	5520	8.0	24.5
NOV.												
01...	2.6	.08	1500	2520	2490	3.43	240	0	23	3740	8.3	22.0
DEC.												
06...	1.8	.93	1100	2710	2750	3.69	560	91	14	4170	7.8	14.0
JAN.												
02...	2.4	.47	1300	2430	2370	3.30	350	0	17	3570	8.0	14.0
FEB.												
05...	1.8	.11	1100	2200	2240	2.99	460	0	13	3180	8.0	16.0
MAR.												
01...	1.3	.03	680	1980	1880	2.69	520	210	8.4	2890	8.1	19.0
APR.												
03...	2.8	.13	480	2100	2150	2.86	260	0	19	3340	8.2	22.0
MAY												
01...	2.9	.01	1200	2130	2170	2.90	230	0	19	3400	8.2	25.0
JUNE												
03...	3.0	.06	1200	2110	2070	2.87	200	0	21	3300	8.1	24.0
JULY												
01...	2.1	.35	1200	2430	2430	3.30	440	0	15	3770	8.0	25.0
AUG.												
01...	1.1	.32	750	1900	1890	2.58	510	160	9.1	2890	--	26.0
SEP.												
03...	2.9	.35	1200	2080	2040	2.83	130	0	26	3260	--	26.0

09429300 COLORADO RIVER BELOW CIBOLA VALLEY, ARIZ.

LOCATION.--Lat 33°13'16", long 114°40'18", in NE¼SW¼ sec.30, T.2 S., R.23 W., Yuma County, at gaging station on left bank 6.7 mi (10.8 km) south of Cibola, 38 mi (61 km) upstream from Imperial Dam, and 52.1 mi (83.2 km) downstream from Palo Verde Dam.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
01...	0830	11	10	88	31	130	4.9	158	0	350	120	.4
09...	1200	--	--	--	--	--	--	--	--	--	--	--
15...	0900	--	--	--	--	--	--	--	--	--	--	--
23...	0750	--	--	--	--	--	--	--	--	--	--	--
29...	1200	--	--	--	--	--	--	--	--	--	--	--
NOV.												
05...	0800	12	10	100	35	180	5.8	198	0	390	170	.4
12...	1310	--	--	--	--	--	--	--	--	--	--	--
19...	1300	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
03...	1330	13	10	110	36	200	7.2	212	0	420	200	.5
10...	0945	--	--	--	--	--	--	--	--	--	--	--
18...	1330	--	--	--	--	--	--	--	--	--	--	--
27...	1000	11	10	95	32	160	5.4	181	0	350	140	.5
JAN.												
08...	0905	--	--	--	--	--	--	--	--	--	--	--
14...	0820	--	--	--	--	--	--	--	--	--	--	--
21...	0900	--	--	--	--	--	--	--	--	--	--	--
28...	0900	--	--	--	--	--	--	--	--	--	--	--
FEB.												
04...	1230	11	80	98	33	150	6.2	168	0	380	150	.4
11...	1200	--	--	--	--	--	--	--	--	--	--	--
19...	1215	--	--	--	--	--	--	--	--	--	--	--
25...	0630	--	--	--	--	--	--	--	--	--	--	--
MAR.												
04...	1150	11	0	100	33	170	5.8	191	0	390	160	.6
11...	1210	--	--	--	--	--	--	--	--	--	--	--
18...	1245	--	--	--	--	--	--	--	--	--	--	--
25...	1210	--	--	--	--	--	--	--	--	--	--	--
APR.												
01...	1250	9.3	20	90	30	120	4.8	166	0	320	100	.4
08...	0900	--	--	--	--	--	--	--	--	--	--	--
15...	1205	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--
29...	1200	9.9	10	96	32	150	6.3	185	0	340	130	.4
MAY												
06...	1300	--	--	--	--	--	--	--	--	--	--	--
13...	1140	--	--	--	--	--	--	--	--	--	--	--
20...	1250	--	--	--	--	--	--	--	--	--	--	--
29...	1030	33	60	96	33	150	4.8	185	0	340	140	.4
JUNE												
03...	0900	--	--	--	--	--	--	--	--	--	--	--
10...	1200	--	--	--	--	--	--	--	--	--	--	--
17...	1220	--	--	--	--	--	--	--	--	--	--	--
24...	1205	--	--	--	--	--	--	--	--	--	--	--
JULY												
01...	1240	9.5	10	94	33	140	5.3	177	0	340	130	.4
08...	1215	--	--	--	--	--	--	--	--	--	--	--
15...	1135	--	--	--	--	--	--	--	--	--	--	--
22...	1215	--	--	--	--	--	--	--	--	--	--	--
29...	1125	--	--	--	--	--	--	--	--	--	--	--
AUG.												
05...	1210	11	20	88	31	140	6.4	174	0	310	130	.4
12...	1045	--	--	--	--	--	--	--	--	--	--	--
19...	1145	--	--	--	--	--	--	--	--	--	--	--
26...	1140	--	--	--	--	--	--	--	--	--	--	--
SEP.												
03...	1140	11	50	93	29	150	6.1	180	0	330	140	.5
09...	1230	--	--	--	--	--	--	--	--	--	--	--
16...	1150	--	--	--	--	--	--	--	--	--	--	--
23...	1200	--	--	--	--	--	--	--	--	--	--	--
30...	1200	12	30	95	35	150	5.8	186	--	360	150	.5

09429300 COLORADO RIVER BELOW CIBOLA VALLEY, ARIZ.--Continued

DRAINAGE AREA.--183,800 mi² (476,000 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: January 1969 to current year.
Water temperatures: March 1956 to December 1966.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.											
01...	.15	210	836	814	1.11	350	220	3.0	1250	8.2	23.5
09...	--	--	886	--	1.20	--	--	--	1370	--	23.0
15...	--	--	778	--	1.06	--	--	--	1250	--	23.5
23...	--	--	812	--	1.10	--	--	--	1240	--	20.5
29...	--	--	956	--	1.30	--	--	--	1510	--	19.5
NOV.											
05...	.25	180	962	992	1.31	390	230	3.9	1520	8.3	16.5
12...	--	--	968	--	1.32	--	--	--	1550	--	21.5
19...	--	--	782	--	1.06	--	--	--	1200	--	14.5
26...	--	--	828	--	1.13	--	--	--	1320	--	15.0
DEC.											
03...	.32	230	1060	1090	1.44	420	250	4.2	1650	8.2	13.5
10...	--	--	968	--	1.32	--	--	--	1520	--	14.5
18...	--	--	944	--	1.28	--	--	--	1510	--	13.0
27...	.48	180	866	885	1.18	370	220	3.6	1380	8.1	12.0
JAN.											
08...	--	--	1030	--	1.40	--	--	--	1670	--	10.0
14...	--	--	1240	--	1.69	--	--	--	1900	--	13.0
21...	--	--	1030	--	1.40	--	--	--	1640	--	14.0
28...	--	--	816	--	1.11	--	--	--	1300	--	10.0
FEB.											
04...	.35	200	914	913	1.24	380	240	3.3	1410	8.1	9.5
11...	--	--	890	--	1.21	--	--	--	1400	--	8.5
19...	--	--	948	--	1.29	--	--	--	1430	--	13.5
25...	--	--	840	--	1.14	--	--	--	1330	--	9.5
MAR.											
04...	.30	220	932	966	1.27	390	230	3.8	1480	8.1	13.5
11...	--	--	924	--	1.26	--	--	--	1490	--	14.5
18...	--	--	882	--	1.20	--	--	--	1390	--	16.0
25...	--	--	818	--	1.11	--	--	--	1280	--	16.5
APR.											
01...	.28	170	768	758	1.04	350	210	2.8	1200	8.1	18.0
08...	--	--	810	--	1.10	--	--	--	1280	--	19.0
15...	--	--	830	--	1.13	--	--	--	1300	--	19.5
22...	--	--	852	--	1.16	--	--	--	1310	--	--
29...	.33	200	884	857	1.20	370	220	3.4	1370	8.0	18.0
MAY											
06...	--	--	748	--	1.02	--	--	--	1190	--	19.5
13...	--	--	972	--	1.32	--	--	--	1520	--	19.5
20...	--	--	742	--	1.01	--	--	--	1180	--	19.5
29...	.02	200	886	889	1.20	380	220	3.4	1400	8.1	--
JUNE											
03...	--	--	942	--	1.28	--	--	--	1470	--	--
10...	--	--	928	--	1.26	--	--	--	1480	--	25.0
17...	--	--	834	--	1.13	--	--	--	1320	--	25.5
24...	--	--	822	--	1.13	--	--	--	1300	--	29.0
JULY											
01...	.90	190	834	844	1.15	370	230	3.2	1320	8.1	24.5
08...	--	--	802	--	1.09	--	--	--	1240	--	24.5
15...	--	--	814	--	1.11	--	--	--	1260	--	28.0
22...	--	--	852	--	1.16	--	--	--	1330	--	28.5
29...	--	--	836	--	1.14	--	--	--	1290	--	30.5
AUG.											
05...	.33	200	826	804	1.12	350	200	3.3	1310	8.0	30.5
12...	--	--	798	--	1.09	--	--	--	1250	--	28.5
19...	--	--	810	--	1.10	--	--	--	1270	--	25.5
26...	--	--	884	--	1.20	--	--	--	1400	--	25.5
SEP.											
03...	.34	260	902	850	1.23	350	200	3.5	1400	8.3	28.5
09...	--	--	776	--	1.06	--	--	--	1210	--	26.0
16...	--	--	786	--	1.07	--	--	--	1240	--	24.5
23...	--	--	914	--	1.24	--	--	--	1440	--	24.5
30...	.40	480	930	902	1.26	380	230	3.3	1440	--	23.5

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, ARIZ.-CALIF.
(National stream-quality accounting network, pesticide, radiochemical, and tritium network station)

LOCATION.--Lat 32°52'59", long 114°27'55", in NW¼SW¼ sec.9, T.15 S., R.24 E., San Bernardino meridian, Imperial County, Calif., above trash racks at All-American Canal headworks at west end of Imperial Dam, 5 mi (8 km) upstream from Laguna Dam, 15 mi (24 km) northeast of Yuma, 90 mi (145 km) downstream from Palo Verde Dam, and 147 mi (237 km) downstream from Parker Dam.

DRAINAGE AREA.--184,600 mi² (478,100 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: August 1969 to current year.
Prior to October 1971, published as sta 09429500, Colorado River at Imperial Dam, Ariz.-Calif.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.										
01...	8490	9.0	90	33	140	6.3	166	0	345	124
08...	7690	9.0	89	35	145	6.3	172	0	350	128
15...	7150	8.0	90	35	150	6.3	176	0	355	134
22...	6540	8.0	94	33	150	6.3	176	0	355	131
29...	6260	9.0	94	34	150	7.2	182	0	355	135
NOV.										
05...	4850	8.0	99	36	165	6.9	190	0	380	148
12...	5370	7.0	98	33	155	6.2	182	0	365	140
19...	5820	9.0	98	33	155	5.9	184	0	365	135
26...	4580	10	99	36	160	6.3	192	0	370	145
DEC.										
03...	4370	10	103	32	170	6.3	190	0	380	155
10...	4990	8.0	103	31	155	5.8	184	0	370	140
17...	5430	9.0	97	34	150	6.3	180	0	360	132
24...	3780	9.0	105	34	175	6.2	196	0	385	158
31...	5440	10	98	33	160	6.6	184	0	370	140
JAN.										
07...	3910	9.0	99	32	155	6.7	186	0	365	138
14...	2180	10	114	38	205	6.7	222	0	410	200
21...	3410	11	106	38	190	6.7	210	0	400	180
28...	6060	12	95	32	145	6.3	180	0	350	128
FEB.										
04...	7380	8.0	91	32	135	6.2	168	0	340	118
11...	6680	9.0	94	31	140	6.0	176	0	345	120
18...	6950	8.0	94	31	140	6.5	174	0	345	120
25...	8130	8.0	94	33	140	6.3	176	0	350	122
MAR.										
04...	7890	7.0	94	33	140	6.3	176	0	350	122
11...	8390	8.0	94	31	140	6.3	176	0	340	120
18...	9220	9.0	94	31	135	6.1	172	0	340	120
25...	10960	9.0	90	32	130	6.2	172	0	335	110
APR.										
01...	10810	8.0	90	33	135	6.4	174	0	340	115
08...	12380	8.0	91	32	130	6.7	172	0	340	112
15...	11810	8.0	90	33	130	6.5	172	0	340	112
22...	12150	8.0	92	32	135	6.3	176	0	340	115
29...	11600	8.0	91	32	135	6.2	176	0	340	115
MAY										
06...	10220	8.0	95	30	140	6.3	180	0	345	118
13...	9990	8.0	94	31	140	6.3	178	0	340	118
20...	9230	8.0	92	34	140	6.3	180	0	350	118
29...	10500	7.0	94	33	140	6.0	178	0	350	122
JUNE										
03...	9900	6.0	94	31	135	6.4	176	0	340	118
10...	10000	6.0	92	32	135	6.1	176	0	340	118
17...	10300	7.0	93	31	135	6.2	174	0	340	115
24...	11200	7.0	93	31	130	6.4	172	0	340	110
JULY										
01...	12100	7.0	88	34	125	6.6	168	0	335	108
08...	12500	6.0	91	32	130	6.3	172	0	340	110
15...	12500	7.0	87	35	130	6.7	170	0	340	110
22...	10200	8.0	90	33	135	6.2	174	0	340	115
29...	11700	7.0	90	32	130	6.7	168	0	335	110
AUG.										
05...	12740	7.0	89	31	125	6.4	168	0	330	105
12...	12640	6.0	86	34	130	6.4	164	0	335	112
19...	11100	7.0	90	33	130	6.3	168	0	340	112
26...	11000	7.0	88	33	130	6.3	166	0	340	108
SEP.										
02...	9340	7.0	90	33	135	6.3	170	0	345	115
09...	9820	6.0	92	31	135	6.5	168	0	340	115
16...	9460	7.0	93	30	135	6.5	168	0	340	115
23...	9270	7.0	92	31	135	6.5	168	0	340	115

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, ARIZ.-CALIF.--Continued

EXTREMES.--Current year.
Specific conductance: Maximum daily, 1,840 micromhos Jan. 16; minimum daily, 1,190 micromhos Aug. 4.

Period of record:
Specific conductance: Maximim daily, 1,880 micromhos Nov. 21, 1969; minimum daily, 1,160 micromhos Mar. 26, 27, 1973.

REMARKS.--Stream discharges reported with analyses represent total flow reaching Imperial Dam. Daily specific-conductance record furnished by Bureau of Reclamation. Since January 1971, daily specific-conductance measurements have been made using a composite of four water samples taken at 6-hour intervals. Composites of four water samples per day are analyzed for major chemical constituents. Tritium analyses available from U.S. Geological Survey, Water Resources Division, Reston, Virginia.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (JTU)
OCT.										
01...	.5	820	831	1.12	360	224	3.2	1300	8.1	--
08...	.5	848	849	1.15	365	224	3.3	1330	8.1	--
15...	.5	866	865	1.18	370	226	3.4	1350	8.1	--
22...	.6	864	866	1.18	370	226	3.4	1350	8.0	--
29...	.6	894	876	1.22	375	226	3.4	1370	8.2	--
NOV.										
05...	.6	946	938	1.29	395	239	3.6	1460	8.2	--
12...	.6	904	896	1.23	380	231	3.5	1410	8.0	--
19...	.5	896	893	1.22	380	229	3.5	1400	8.1	--
26...	.5	928	923	1.26	395	238	3.5	1450	8.1	--
DEC.										
03...	.6	962	950	1.31	390	230	3.8	1490	8.1	1
10...	.4	944	905	1.28	385	234	3.4	1420	8.1	1
17...	.5	886	879	1.20	380	232	3.3	1370	8.1	2
24...	.5	982	971	1.34	400	240	3.8	1520	8.1	1
31...	.4	956	910	1.30	380	229	3.6	1430	8.1	1
JAN.										
07...	.6	914	898	1.24	380	228	3.5	1400	8.2	2
14...	.6	1110	1100	1.51	440	258	4.2	1730	8.2	1
21...	.5	1040	1040	1.41	420	248	4.0	1630	8.3	1
28...	.6	848	859	1.15	370	222	3.3	1340	8.1	2
FEB.										
04...	.4	798	815	1.08	360	222	3.1	1270	8.1	3
11...	.6	830	832	1.13	360	220	3.2	1310	8.1	2
18...	.5	838	832	1.14	360	218	3.2	1310	8.1	2
25...	.5	838	842	1.14	370	226	3.2	1320	8.1	2
MAR.										
04...	.5	846	841	1.15	370	226	3.2	1310	8.1	2
11...	.6	832	828	1.13	360	216	3.2	1290	8.1	3
18...	.6	828	822	1.13	360	219	3.1	1280	8.0	3
25...	.6	804	799	1.09	355	214	3.0	1240	8.1	3
APR.										
01...	.6	816	815	1.11	360	218	3.1	1270	8.1	2
08...	.6	808	805	1.10	360	219	3.0	1260	8.1	2
15...	.6	804	806	1.09	360	219	3.0	1260	8.1	2
22...	.6	820	817	1.12	360	216	3.1	1270	8.1	2
29...	.6	818	814	1.11	360	216	3.1	1270	8.0	2
MAY										
06...	.6	834	830	1.13	360	212	3.2	1300	8.1	2
13...	.6	824	825	1.12	360	214	3.2	1290	8.0	2
20...	.6	840	837	1.14	370	222	3.2	1300	8.0	2
29...	.7	844	842	1.15	370	224	3.2	1320	8.1	1
JUNE										
03...	.6	830	819	1.13	360	216	3.1	1280	--	1
10...	.6	822	818	1.12	360	216	3.1	1280	--	3
17...	.6	818	815	1.11	360	218	3.1	1270	--	1
24...	.6	800	804	1.09	360	219	3.0	1250	--	1
JULY										
01...	.6	790	788	1.07	360	222	2.9	1230	--	2
08...	.5	804	802	1.09	360	219	3.0	1250	--	1
15...	.6	806	801	1.18	360	220	3.0	1250	--	2
22...	.5	820	815	1.13	360	218	3.1	1270	--	1
29...	.6	800	795	1.09	355	217	3.0	1240	--	1
AUG.										
05...	.5	782	778	1.06	350	212	2.9	1220	--	1
12...	.5	798	794	1.09	355	220	3.0	1240	--	2
19...	.5	806	803	1.10	360	222	3.0	1260	--	1
26...	.5	800	796	1.09	355	219	3.0	1240	--	1
SEP.										
02...	.7	818	817	1.11	360	220	3.1	1280	--	1
09...	.6	814	810	1.11	355	217	3.1	1270	--	1
16...	.5	814	811	1.11	355	217	3.1	1270	--	2
23...	.5	810	811	1.10	355	217	3.1	1270	--	1

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, ARIZ.-CALIF.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
MAY								
15...	1140	10240	.29	.28	.00	.01	.29	.29
29...	1100	10360	.19	.19	.02	.00	.21	.19
JUNE								
12...	1140	10560	--	--	--	--	.11	--
JULY								
10...	1140	13070	--	.13	--	.00	.13	.13
24...	1105	10380	.10	--	.01	--	.11	--
AUG.								
14...	1140	12670	.10	--	.01	--	.11	--
28...	1015	11400	.13	.11	.00	.00	.13	.11
SEP.								
10...	1330	10040	.38	--	.00	.01	.38	.37
25...	1100	9840	.16	.16	.00	.00	.16	.16

DATE	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)
MAY							
15...	.02	.20	.22	.51	2.3	.03	.00
29...	.10	.27	.37	.58	2.6	.08	--
JUNE							
12...	.05	.51	.56	.67	3.0	.00	--
JULY							
10...	--	--	.41	.54	2.4	.02	--
24...	.05	.08	.13	.24	1.1	.02	--
AUG.							
14...	.06	.35	.41	.52	2.3	.03	.01
28...	.05	.36	.41	.54	2.4	.01	--
SEP.							
10...	.07	.16	.23	.61	2.7	.01	--
25...	.03	.30	.33	.49	2.2	.02	--

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COL. UNITS PER 100 ML)
OCT.						
17...	0925	7780	--	--	34	80
NOV.						
14...	0600	5040	--	--	45	--
DEC.						
12...	1120	--	--	--	18	--
JAN.						
15...	1100	2140	--	--	2	--
FEB.						
12...	1100	4080	--	--	8	--
MAR.						
20...	1415	11300	--	--	21	--
APR.						
15...	1140	10240	--	--	6	20
29...	1100	10360	--	--	--	--
JUNE						
12...	1140	10560	0.7	.9	--	--
JULY						
10...	1140	13070	.1	0.0	--	--
AUG.						
14...	1140	12670	--	--	--	--
14...	1200	12700	--	--	29	41
28...	1015	11400	--	--	--	--
SEP.						
10...	1330	10040	1.1	1.5	17	60
25...	1100	9840	--	--	--	--

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, ARIZ.-CALIF.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DIELDRIN (UG/L)
OCT.								
18...	1540	7400	.00	.0	.00	.00	.00	.00
NOV.								
14...	1435	5970	.00	.0	.00	.00	.00	.00
DEC.								
19...	1430	6480	.00	.0	.00	.00	.00	.00
JAN.								
18...	1700	2690	.00	.0	.00	.00	.00	.00
FEB.								
13...	1500	6830	.00	.0	.00	.00	.00	.00
MAR.								
27...	1400	11500	.00	.0	.00	.00	.00	.00
MAY								
15...	1140	10240	.00	.0	.00	.00	.00	.00
AUG.								
14...	1140	12670	.00	.0	.00	.00	.00	.00

DATE	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	TOXAPHENE (UG/L)	DIAZINON (UG/L)	ETHION (UG/L)	MALATHION (UG/L)	PARATHION (UG/L)
OCT.									
18...	.00	.00	.00	.00	0	.00	--	.00	.00
NOV.									
14...	.00	.00	.00	.00	0	.00	--	.00	.00
DEC.									
19...	.00	.00	.00	.00	--	.00	--	.00	.00
JAN.									
18...	.00	.00	.00	.00	0	.00	--	.00	.00
FEB.									
13...	.00	.00	.00	.00	0	.00	--	.00	.00
MAR.									
27...	.00	.00	.00	.00	0	.00	--	.00	.00
MAY									
15...	.00	.00	.00	.00	0	.00	.00	.00	.00
AUG.									
14...	.00	.00	.00	.00	0	.00	--	.00	.00

DATE	METHYL PARATHION (UG/L)	TRITHION (UG/L)	METHYL TRITHION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	PCB (UG/L)	TEMPERATURE (DEG C)
OCT.								
18...	.00	--	--	.00	.00	.00	.0	23.5
NOV.								
14...	.00	--	--	.00	.00	.00	.0	18.0
DEC.								
19...	.00	--	--	.00	.00	.00	.0	12.5
JAN.								
18...	.00	--	--	.00	.00	.00	.0	15.5
FEB.								
13...	.00	--	--	.00	.00	.00	.0	12.5
MAR.								
27...	.00	--	--	.00	.00	.00	.0	18.0
MAY								
15...	.00	.00	.00	.00	.00	.00	.0	23.0
AUG.								
14...	.00	--	--	.00	.00	.00	.0	27.5

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, ARIZ.-CALIF.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CALCIUM (CA) (MG/L)
MAY										
15...	1140	10240	1	0	1	200	1	39	40	95
29...	1100	10360	--	--	--	190	--	--	--	--
JUNE										
12...	1140	10560	--	--	--	180	--	--	--	--
JULY										
10...	1140	13070	--	--	--	180	--	--	--	--
24...	1105	10380	--	--	--	--	--	--	--	--
AUG.										
14...	1140	12670	1	1	2	--	<1	<9	<10	--
28...	1015	11400	--	--	--	170	--	--	--	--
SEP.										
10...	1330	10840	--	--	--	190	--	--	--	--
25...	1100	9640	--	--	--	220	--	--	--	--

DATE	DISSOLVED CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DISSOLVED IRON (FE) (UG/L)
MAY										
15...	40	0	40	2	<40	<50	5	5	10	50
29...	--	--	--	--	--	--	--	--	--	--
JUNE										
12...	--	--	--	--	--	--	--	--	--	--
JULY										
10...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
AUG.										
14...	0	0	0	0	<50	<50	1	<9	<10	140
28...	--	--	--	--	--	--	--	--	--	--
SEP.										
10...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	SUSPENDED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAGNESIUM (MG) (MG/L)	DISSOLVED MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)
MAY										
15...	320	26	<74	<100	32	40	0	40	.0	--
29...	230	--	--	--	--	--	--	--	--	--
JUNE										
12...	230	--	--	--	--	--	--	--	--	--
JULY										
10...	240	--	--	--	--	--	--	--	--	--
24...	360	--	--	--	--	--	--	--	--	--
AUG.										
14...	290	5	<95	<100	--	0	20	20	.1	.0
28...	280	--	--	--	--	--	--	--	--	--
SEP.										
10...	220	--	--	--	--	--	--	--	--	--
25...	260	--	--	--	--	--	--	--	--	--

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, ARIZ.-CALIF.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL POTASSIUM (K) (MG/L)	DISSOLVED SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SODIUM (NA) (MG/L)	DISSOLVED ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL FILTRABLE RESIDUE (MG/L)
MAY										
15...	--	5.1	0	--	4	140	20	20	40	--
29...	--	--	--	--	--	--	--	--	--	--
JUNE										
12...	--	--	--	--	--	--	--	--	--	--
JULY										
10...	--	--	--	--	--	--	--	--	--	850
24...	--	--	--	--	--	--	--	--	--	--
AUG.										
14...	.1	--	1	1	2	--	30	20	50	--
28...	--	--	--	--	--	--	--	--	--	--
SEP.										
10...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL NONFILTRABLE RESIDUE (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)
MAY									
15...	9	--	8.0	23.0	4	8.4	9	4.3	2
29...	24	--	--	25.5	--	--	12	3.9	--
JUNE									
12...	1	1340	7.9	27.0	--	8.5	0	3.8	0
JULY									
10...	34	1280	7.7	27.0	--	7.4	10	2.5	0
24...	2	--	--	30.0	--	--	9	--	--
AUG.									
14...	8	1260	7.8	27.5	--	7.6	10	5.9	--
28...	17	--	--	27.5	--	--	0	9.3	--
SEP.									
10...	9	1360	8.1	29.5	--	8.1	7	6.1	--
25...	1	--	--	27.0	--	--	5	3.0	--

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, ARIZ.-CALIF.--Continued

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUSPENDED GROSS ALPHA AS U-NAT. (UG/L)	DISSOLVED GROSS BETA AS CS-137 (PC/L)	SUSPENDED GROSS BETA AS CS-137 (PC/L)	DISSOLVED GROSS BETA AS SR90 /Y90 (PC/L)
JAN. 02...	1100	--	13	1.1	11	1.9	9.1
JULY 10...	1140	13070	12	.5	7.3	1.2	6.2

DATE	SUSPENDED GROSS BETA AS SR90 /Y90 (PC/L)	DISSOLVED RA-226 (RADON METHOD) (PC/L)	DISSOLVED NATURAL URANIUM (U) (UG/L)	TOTAL FILTRABLE RESIDUE (MG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	TEMPERATURE (DEG C)
JAN. 02...	1.7	.08	4.7	960	19	--
JULY 10...	.9	.13	5.0	850	34	27.0

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, ARIZ.-CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1300	1370	1490	1430	1320	1300	1270	1270	1300	1230	1240	1290
2	1260	1370	1470	1420	1320	1320	1260	1290	1280	1270	1240	1280
3	1300	1410	1490	1410	1330	1310	1280	1310	1280	1260	1250	1260
4	1300	1450	1460	1400	1270	1310	1290	1310	1290	1250	1190	1260
5	1290	1460	1460	1400	1290	1310	1290	1310	1280	1280	1220	1260
6	1310	1460	1430	1440	1290	1290	1290	1300	1290	1280	1230	1280
7	1330	1450	1410	1400	1310	1280	1280	1300	1300	1240	1240	1290
8	1330	1390	1430	1380	1340	1280	1260	1280	1320	1250	1240	1290
9	1290	1380	1470	1440	1370	1310	1260	1290	1310	1250	1270	1270
10	1320	1400	1420	1470	1350	1300	1280	1320	1280	1260	1270	1270
11	1310	1410	1410	1510	1310	1290	1280	1330	1290	1260	1260	1260
12	1330	1410	1400	1600	1320	1340	1270	1310	1300	1260	1240	1260
13	1360	1390	1380	1650	1320	1310	1280	1290	1300	1270	1240	1280
14	1360	1390	1360	1730	1300	1290	1280	1280	1300	1240	1250	1290
15	1350	1380	1380	1820	1320	1310	1260	1300	1310	1250	1240	1260
16	1330	1380	1410	1840	1330	1330	1260	1310	1290	1230	1240	1270
17	1300	1400	1370	1830	1330	1320	1280	1320	1270	1230	1240	1260
18	1300	1450	1350	1760	1310	1280	1280	1340	1270	1240	1240	1260
19	1310	1400	1350	1660	1310	1270	1290	1330	1280	1250	1260	1280
20	1330	1350	1380	1670	1320	1270	1300	1300	1270	1280	1240	1310
21	1350	1350	1390	1630	1310	1260	1300	1300	1290	1290	1250	1270
22	1350	1360	1420	1600	1320	1270	1270	1300	1270	1270	1250	1270
23	1350	1410	1470	1510	1350	1280	1270	1310	1260	1270	1250	1270
24	1340	1450	1520	1460	1370	1250	1260	1320	1250	1280	1270	1300
25	1360	1470	1570	1450	1320	1240	1270	1330	1250	1310	1260	1290
26	1390	1450	1460	1450	1280	1260	1290	1330	1260	1300	1240	1290
27	1410	1450	1340	1440	1270	1260	1290	1300	1260	1290	1230	1310
28	1420	1500	1340	1340	1280	1260	1280	1320	1260	1280	1250	1320
29	1370	1520	1390	1300	---	1280	1270	1320	1270	1240	1260	1330
30	1370	1520	1420	1300	---	1290	1270	1310	1260	1240	1290	1340
31	1360	---	1430	1340	---	1300	---	1320	---	1230	1300	---
MEAN	1340	1420	1420	1520	1320	1290	1280	1310	1280	1260	1250	1280
YEAR	MAX	1840	MIN	1190	MEAN	1330						

09429600 COLORADO RIVER BELOW LAGUNA DAM, ARIZ.-CALIF.

LOCATION.--Lat 32°48'44", long 114°30'51", in SE¼NE¼ sec.35, T.15 S., R.23 E., San Bernardino meridian, in California, Imperial County, at gaging station on right bank, 1.4 mi (2.3 km) downstream from Laguna Dam, 2.8 mi (4.5 km) northeast of Betty, Calif., and 10 mi (16 km) northeast of Yuma, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
05...	1045	295	14	50	93	33	170	5.7	179	0	380	150
NOV.												
05...	0935	360	10	--	94	35	175	6.6	194	0	375	155
12...	0320	295	11	--	98	35	175	6.6	194	0	375	160
19...	0950	284	9.0	--	101	35	175	6.2	200	0	380	162
26...	0400	235	11	--	103	35	180	6.3	206	0	385	165
DEC.												
03...	0320	242	11	--	106	34	180	6.3	206	0	385	168
10...	0340	245	11	--	102	33	175	6.1	200	0	375	155
17...	0140	285	11	--	100	32	170	6.4	192	0	370	150
24...	1255	290	10	--	98	33	170	6.2	190	0	370	150
31...	0140	295	10	--	94	32	175	6.6	192	0	375	155
JAN.												
07...	0140	290	11	--	103	35	180	6.8	204	0	380	168
14...	0130	332	11	--	113	35	190	6.7	210	0	400	180
21...	0130	198	12	--	118	35	215	6.9	224	0	415	215
28...	0130	195	13	--	106	38	210	6.9	222	0	400	202
FEB.												
04...	0115	171	11	--	102	32	180	6.6	200	0	370	165
11...	0130	270	11	--	97	35	175	6.4	190	0	370	160
18...	0140	252	10	--	98	33	170	6.7	190	0	370	152
25...	0115	245	11	--	98	33	155	6.5	188	0	360	142
MAR.												
04...	0120	420	9.0	--	97	31	155	6.7	182	0	355	138
11...	0145	453	9.0	--	92	29	150	6.5	184	0	353	128
18...	0130	350	13	--	98	33	165	6.4	188	0	365	150
25...	0145	348	9.0	--	97	32	155	6.4	188	0	355	140
APR.												
01...	0130	429	9.0	--	95	31	150	6.4	188	0	350	130
08...	0250	358	9.0	--	97	31	150	6.7	186	0	350	132
15...	0125	355	10	--	100	31	155	6.6	190	0	355	140
22...	0130	449	8.0	--	97	30	150	7.1	184	0	350	128
29...	0210	525	9.0	--	94	32	150	6.5	184	0	350	128
MAY												
06...	0130	978	8.0	--	94	29	150	6.7	184	0	350	128
13...	0115	922	8.0	--	95	31	150	6.7	184	0	350	128
20...	0100	1040	8.0	--	97	32	145	6.7	184	0	355	128
27...	0115	1060	8.0	--	97	32	150	6.8	184	0	355	130
JUNE												
03...	0120	355	9.0	--	94	33	170	6.8	200	0	370	155
10...	0200	220	9.0	--	100	33	170	6.8	196	0	370	150
17...	0205	480	8.0	--	94	33	150	6.5	184	0	355	128
24...	0135	352	9.0	--	97	31	155	6.7	188	0	355	135
JULY												
01...	0200	332	9.0	--	94	32	145	7.0	182	0	350	125
08...	0115	355	7.0	--	94	32	145	7.0	180	0	350	125
15...	0100	510	6.0	--	90	34	150	7.2	176	0	355	128
22...	0100	322	6.0	--	93	32	155	6.9	182	0	355	138
29...	0115	358	6.0	--	93	32	155	7.0	180	0	355	135
AUG.												
05...	0130	363	9.0	--	89	30	130	6.2	166	0	330	110
12...	0140	372	10	--	94	34	155	7.0	184	0	360	140
19...	0110	360	8.0	--	95	34	145	6.3	176	0	350	125
26...	0110	390	7.0	--	94	34	155	6.7	184	0	360	138
SEP.												
02...	0300	278	9.0	--	95	34	160	6.7	186	0	365	140
09...	0110	876	9.0	--	94	31	145	6.7	178	0	350	125
16...	0115	890	9.0	--	92	31	140	6.9	180	0	340	120
23...	0125	890	8.0	--	92	31	140	6.7	180	0	340	120
30...	0140	315	11	--	98	34	170	6.7	196	0	370	152

09429600 COLORADO RIVER BELOW LAGUNA DAM, ARIZ.-CALIF.--Continued

DRAINAGE AREA.--184,700 mi² (478,400 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1972 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RES-IDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
05...	.6	.09	260	928	935	1.27	370	220	3.9	1410	8.2	--
NOV.												
05...	.6	--	--	950	948	1.29	360	221	3.9	1490	8.1	18.0
12...	.6	--	--	962	958	1.31	390	231	3.9	1520	8.1	18.5
19...	.5	--	--	976	969	1.33	395	231	3.8	1530	8.1	16.0
20...	.5	--	--	986	989	1.34	400	231	3.9	1560	8.1	14.0
DEC.												
03...	.7	--	--	998	994	1.36	405	236	3.9	1570	8.1	14.0
10...	.5	--	--	1010	958	1.37	390	226	3.9	1520	8.0	10.0
17...	.5	--	--	944	936	1.28	380	222	3.8	1460	8.1	12.5
29...	.6	--	--	962	933	1.41	340	224	3.8	1470	8.0	12.5
31...	.6	--	--	974	949	1.32	380	222	3.9	1480	7.9	16.0
JAN.												
07...	.7	--	--	1010	986	1.37	400	232	3.9	1560	8.0	11.5
14...	.6	--	--	1050	1040	1.43	425	253	4.0	1640	8.0	11.0
21...	.6	--	--	1130	1130	1.54	440	256	4.5	1790	8.1	16.5
28...	.6	--	--	1070	1090	1.46	420	238	4.5	1710	7.9	12.5
FEB.												
04...	.7	--	--	982	987	1.31	385	221	4.0	1530	8.1	13.5
11...	.7	--	--	948	950	1.29	385	229	3.9	1490	8.0	13.0
18...	.7	--	--	930	935	1.26	380	224	3.8	1470	8.0	13.5
25...	.6	--	--	892	900	1.21	380	226	3.5	1420	8.0	12.0
MAR.												
04...	.6	--	--	860	883	1.17	370	221	3.5	1390	8.0	15.5
11...	.6	--	--	872	863	1.19	365	214	3.4	1350	8.0	13.0
18...	.6	--	--	926	922	1.26	360	226	3.7	1450	8.1	17.5
25...	.6	--	--	890	889	1.21	375	221	3.5	1400	8.0	20.0
APR.												
01...	.6	--	--	852	866	1.16	365	211	3.4	1360	8.0	18.5
08...	.6	--	--	850	869	1.16	370	218	3.4	1370	8.0	19.5
15...	.6	--	--	896	893	1.22	375	219	3.5	1410	7.9	20.0
22...	.6	--	--	868	863	1.18	365	214	3.4	1350	8.0	18.5
29...	.7	--	--	858	859	1.17	365	214	3.4	1340	8.0	21.0
MAY												
06...	.6	--	--	864	861	1.18	365	214	3.4	1350	7.9	23.0
13...	.6	--	--	856	859	1.18	365	214	3.4	1350	8.0	24.0
20...	.7	--	--	856	862	1.18	375	224	3.3	1350	8.0	21.0
27...	.6	--	--	876	870	1.19	375	224	3.4	1370	8.1	26.5
JUNE												
03...	.6	--	--	956	946	1.30	390	226	3.7	1480	--	23.0
10...	.7	--	--	942	938	1.28	385	224	3.8	1470	--	25.0
17...	.7	--	--	866	867	1.18	370	219	3.4	1350	--	28.5
24...	.7	--	--	882	883	1.20	370	216	3.5	1380	--	25.5
JULY												
01...	.7	--	--	850	854	1.16	365	216	3.3	1340	--	26.5
08...	.6	--	--	854	851	1.16	365	218	3.3	1340	--	29.0
15...	.7	--	--	866	861	1.18	365	220	3.4	1350	--	28.0
22...	.7	--	--	886	881	1.20	370	221	3.5	1390	--	26.5
29...	.7	--	--	884	876	1.20	365	219	3.5	1380	--	30.0
AUG.												
05...	.5	--	--	788	788	1.07	345	209	3.0	1240	--	--
12...	.6	--	--	890	893	1.21	375	224	3.5	1400	--	28.0
19...	.6	--	--	856	846	1.16	360	216	3.3	1330	--	29.0
26...	.7	--	--	912	887	1.24	375	224	3.5	1400	--	29.0
SEP.												
02...	.6	--	--	908	904	1.23	375	222	3.6	1430	--	28.0
09...	.7	--	--	856	850	1.16	360	214	3.3	1330	--	29.5
16...	.6	--	--	834	828	1.13	355	208	3.2	1300	--	25.5
23...	.5	--	--	834	828	1.13	355	208	3.2	1310	--	26.0
30...	.6	--	--	964	940	1.31	385	224	3.8	1470	--	26.5

09429690 COLORADO RIVER ABOVE GILA RIVER, NEAR YUMA, ARIZ.

LOCATION.--Lat 32°43'22", long 114°32'46", in SE¼NE¼ sec.19, T.8 S., R.22 W., Yuma County, on left bank, 0.6 mi (1.0 km) upstream from Gila River, 5 mi (8 km) east of Yuma, 9 mi (14 km) downstream from Laguna Dam, 12 mi (19 km) upstream from northerly international boundary, and 14 mi (22 km) downstream from Imperial Dam.

DRAINAGE AREA.--185,000 mi^2 (479,000 km^2), approximately.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
01...	1330	15	60	110	39	200	5.7	229	0	400	190	.7
09...	1405	15	0	110	39	200	5.5	223	0	400	180	.8
15...	1135	14	10	110	38	200	5.9	227	0	420	180	.8
24...	1400	14	10	130	37	190	6.4	221	0	420	180	.5
31...	1445	19	0	110	38	190	6.4	230	0	420	190	.5
NOV.												
05...	1400	15	20	110	39	190	6.2	220	0	400	180	.3
12...	1100	16	20	110	37	200	6.0	226	0	450	180	.5
19...	1420	15	10	110	39	200	6.1	228	0	400	200	.4
26...	1350	15	10	120	39	210	5.9	237	0	460	200	.5
DEC.												
03...	1125	16	10	120	39	220	5.7	240	0	430	200	.5
10...	1105	16	10	110	38	200	5.8	235	0	420	190	.6
17...	1320	15	10	110	38	190	6.1	226	0	410	180	.6
26...	1415	15	20	110	38	200	5.6	230	0	420	190	.6
JAN.												
02...	1330	13	20	100	34	190	5.8	201	0	370	180	.7
07...	1120	15	10	110	37	200	5.7	230	0	390	200	.6
14...	1445	13	10	110	37	200	6.1	224	0	430	190	.5
21...	1400	17	50	130	43	240	6.1	263	0	460	250	.6
28...	1530	17	20	120	40	230	6.2	248	0	430	230	.7
FEB.												
04...	1330	15	30	120	39	200	6.2	234	0	430	200	.7
11...	1130	14	10	110	36	200	6.9	219	0	420	190	.5
19...	1140	14	10	110	38	190	6.5	220	0	400	190	.6
25...	1415	13	10	110	37	190	6.2	219	0	420	170	.6
MAR.												
04...	1400	12	30	100	36	170	6.0	201	0	370	160	.6
11...	1330	13	40	110	35	170	6.0	180	0	410	160	.6
18...	1410	13	10	110	36	180	6.1	214	0	370	180	.6
25...	1320	13	10	110	35	170	5.7	216	0	370	160	.5
APR.												
01...	1420	12	20	100	35	170	5.5	207	0	360	150	.6
08...	1500	12	40	100	33	170	5.2	199	0	380	140	.7
15...	1355	12	20	110	36	170	5.2	217	0	380	160	.7
22...	1400	11	10	100	35	160	5.1	199	0	380	150	.6
29...	1430	11	10	100	34	160	5.3	195	0	370	140	.9
MAY												
06...	1410	8.7	20	100	33	150	5.6	190	0	360	130	.5
13...	1335	9.0	10	100	34	150	5.2	195	0	360	140	.5
20...	1345	8.0	30	100	34	150	5.2	191	0	330	140	.4
28...	1330	8.6	10	99	34	150	5.5	189	0	370	140	.6
JUNE												
03...	1440	14	20	120	40	200	5.6	236	0	390	180	.4
10...	1330	14	20	120	40	190	5.1	236	0	400	180	.4
17...	1340	11	0	100	35	160	5.2	200	0	340	150	.5
24...	1400	12	10	110	35	170	5.3	210	0	370	150	.6
JULY												
01...	1330	12	20	100	34	170	6.2	209	0	360	160	.5
08...	1330	13	20	100	37	170	6.8	211	0	370	150	.5
15...	1345	13	30	100	34	160	5.3	198	0	360	150	.6
22...	1330	14	20	110	38	170	5.9	218	--	410	160	.6
29...	1350	14	20	100	36	180	5.9	208	0	360	170	.5
AUG.												
05...	1340	13	10	96	31	160	6.6	192	0	350	140	.5
12...	1400	15	10	100	37	180	6.1	211	0	440	160	.6
19...	1345	14	20	100	36	160	6.8	204	0	370	150	.6
26...	1120	14	20	100	36	180	6.6	211	0	380	170	.6
SEP.												
03...	1440	12	10	95	33	160	5.6	185	--	330	150	.6
09...	1130	12	50	93	33	160	5.8	189	--	360	140	.6
16...	1330	12	60	95	32	150	6.5	186	--	340	140	.6
23...	1400	12	20	95	34	140	5.9	184	--	340	130	.5
30...	1345	16	20	120	36	190	6.3	229	--	400	180	.6

09429690 COLORADO RIVER ABOVE GILA RIVER, NEAR YUMA, ARIZ.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished chemical analyses (continuing record) for water years 1961-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.											
01...	.06	270	1100	1070	1.50	440	250	4.2	1680	8.0	25.0
09...	.03	290	1100	1060	1.44	440	250	4.2	1640	8.0	24.0
15...	2.3	270	1090	1090	1.48	430	250	4.2	1650	8.0	21.0
24...	.09	240	1030	1090	1.48	480	300	3.8	1620	8.1	21.5
31...	.12	270	1110	1090	1.48	430	240	4.0	1680	8.0	19.0
NOV.											
05...	.12	260	1070	1050	1.46	440	250	4.0	1650	8.1	19.5
12...	.22	250	1100	1110	1.50	430	240	4.2	1700	8.0	19.5
19...	.18	1700	1100	1090	1.50	440	250	4.2	1710	8.2	16.0
26...	.23	250	1180	1170	1.60	460	270	4.3	1740	8.0	15.0
DEC.											
03...	.19	260	1140	1150	1.55	460	260	4.5	1760	8.1	13.0
10...	.32	260	1110	1100	1.51	430	240	4.2	1700	8.0	13.5
17...	.22	230	1060	1060	1.44	430	250	4.0	1660	8.0	15.5
26...	.20	280	1090	1090	1.48	430	240	4.2	1700	7.9	13.0
JAN.											
02...	.23	240	1030	994	1.40	390	220	4.2	1570	8.1	11.0
07...	.28	260	1130	1070	1.54	430	240	4.2	1690	8.0	13.0
14...	.23	270	1110	1100	1.51	430	240	4.2	1700	8.2	14.0
21...	.08	350	1270	1280	1.73	500	290	4.7	1970	8.0	16.5
28...	.33	300	1230	1200	1.67	460	260	4.6	1860	8.1	14.5
FEB.											
04...	.21	290	1100	1130	1.50	460	270	4.1	1740	8.0	15.0
11...	.25	260	1070	1090	1.46	420	240	4.2	1650	8.0	12.0
19...	.16	290	1100	1060	1.50	430	250	4.0	1670	8.0	15.0
25...	.19	240	1020	1060	1.39	430	250	4.0	1620	8.0	14.5
MAR.											
04...	.18	230	988	955	1.34	400	230	3.7	1510	8.0	17.0
11...	.29	260	1010	995	1.37	420	270	3.6	1520	8.0	16.5
18...	.14	250	1020	1000	1.39	420	250	3.8	1590	8.0	21.0
25...	.23	230	988	972	1.34	420	240	3.6	1540	8.1	24.5
APR.											
01...	.14	230	962	936	1.31	390	220	3.7	1480	8.1	20.5
08...	.17	220	938	940	1.28	390	220	3.8	1460	8.1	20.5
15...	.15	240	1010	982	1.37	420	250	3.6	1540	8.0	20.5
22...	.17	220	972	941	1.32	390	230	3.5	1450	8.1	23.5
29...	.11	220	930	918	1.26	390	230	3.5	1450	8.1	22.0
MAY											
06...	.18	200	882	882	1.20	390	230	3.3	1380	8.2	22.5
13...	.30	200	896	896	1.22	390	230	3.3	1400	8.2	24.5
20...	.19	210	882	863	1.20	390	230	3.3	1390	8.2	23.0
28...	.07	220	892	901	1.21	390	230	3.3	1390	7.5	27.0
JUNE											
03...	.11	260	1080	1070	1.47	460	270	4.0	1690	8.1	26.0
10...	.08	270	1100	1070	1.50	460	270	3.8	1710	8.0	28.0
17...	.13	230	956	901	1.30	390	230	3.5	1470	8.1	28.5
24...	.16	240	994	957	1.35	420	250	3.6	1530	8.1	29.5
JULY											
01...	.13	230	962	947	1.31	390	220	3.7	1510	7.8	29.0
08...	.09	230	990	952	1.35	400	230	3.7	1530	8.1	29.0
15...	.72	230	928	924	1.26	390	230	3.5	1470	8.0	29.0
22...	.09	250	1010	1020	1.37	430	250	3.6	1550	8.2	29.5
29...	.13	250	1020	970	1.39	400	230	3.9	1550	7.9	29.0
AUG.											
05...	.23	220	936	893	1.27	370	210	3.6	1410	7.9	30.5
12...	.18	250	1030	1040	1.40	400	230	3.9	1550	--	28.5
19...	.18	240	976	939	1.33	400	230	3.5	1490	8.1	29.0
26...	.10	220	990	992	1.35	400	220	3.9	1560	7.9	28.0
SEP.											
03...	.13	210	884	878	1.20	370	220	3.6	1390	--	28.5
09...	.47	210	874	900	1.19	370	210	3.6	1400	--	29.0
16...	.15	220	880	869	1.20	370	220	3.4	1370	--	28.5
23...	.14	410	922	849	1.25	380	230	3.1	1370	--	25.0
30...	.12	290	1080	1060	1.47	450	260	3.9	1670	--	27.0

09448500 GILA RIVER AT HEAD OF SAFFORD VALLEY, NEAR SOLOMON, ARIZ.

LOCATION.--Lat 32°52'06", long 109°30'38", in SE¼NE¼ sec.31, T.6 S., R.28 E., Graham County, at gaging station 0.6 mi (1.0 km) downstream from intake of Brown Canal, 8 mi (13 km) northeast of Solomon, and 17 mi (27 km) downstream from San Francisco River.

DRAINAGE AREA.--7,896 mi^2 (20,451 km^2).

PERIOD OF RECORD.--Specific conductance: January 1965 to current year.
Water temperatures: January 1965 to current year.
Sediment records: February 1965 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 2,250 micromhos July 6; minimum daily, 420 micromhos Aug. 6.
Water temperatures: Maximum 37.0°C Aug. 2; minimum, 3.0°C Dec. 25.
Sediment concentrations: Maximum daily, 40,200 mg/l July 16; minimum daily, 6 mg/l Apr. 2.
Sediment discharge: Maximum daily, 156,000 tons (142,000 tonnes) Aug. 5; minimum daily, 1.3 tons (1.2 tonnes) Apr. 2.

Period of record:
Specific conductance (1967-74): Maximum daily, 2,250 micromhos July 6, 1974; minimum daily, 260 micromhos Feb. 15, 28, 29, Apr. 4, 1968, May 15-17, 1973.
Water temperatures (1967-74): Maximum, 37.0°C Aug. 2, 1974; minimum, 1.5°C Jan. 8, 1973.
Sediment concentrations: Maximum daily, 75,000 mg/l Oct. 20, 1972; minimum daily, 4 mg/l May 22, 29, 1971.
Sediment discharge: Maximum daily, 9,130,000 tons (8,280,000 tonnes) Oct. 20, 1972; minimum daily, 0.50 ton (0.45 tonne) May 29, 1971.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1580	1400	1300	1150	1000	1060	1340	1300	1600	1850	950	1200
2	1600	1400	1250	1150	990	1060	1340	1300	1600	1850	950	1200
3	1580	1450	1250	1100	950	1050	1310	1300	1600	1850	950	1200
4	1500	1450	1150	1100	950	1050	1200	1300	1600	1850	850	1390
5	1500	1400	1150	1100	980	1080	1190	1300	1600	1850	645	1100
6	1580	1400	1150	1100	980	1100	1200	1300	1600	2250	620	920
7	1590	1400	1200	1000	970	1100	1200	1400	1600	1800	550	910
8	1600	1400	1200	1000	920	1120	1210	1400	1600	1650	520	940
9	1300	1400	1200	1000	940	1080	1200	1400	1600	1650	550	1150
10	1600	1400	1200	1000	940	1080	1210	1400	1600	1750	740	1250
11	1500	1400	1200	1000	950	1080	1340	1400	1600	1750	700	1350
12	1450	1400	1100	1000	940	1080	1320	1400	1700	1750	400	1350
13	1600	1400	1150	1000	980	1080	1350	1450	---	1750	900	---
14	1500	1400	1150	1000	990	1100	1320	1500	1700	750	980	1250
15	1600	1450	1150	1100	990	1100	1300	1500	1800	1200	---	1250
16	1600	1350	1150	1050	990	1320	1250	1500	1800	575	460	1100
17	1600	1400	1150	1050	990	1270	1200	1500	1800	580	600	720
18	1500	1400	---	1100	980	1300	1190	1500	1800	720	800	720
19	1500	1300	1150	1050	980	1320	1200	1600	1800	900	900	590
20	1500	1400	1150	1050	1000	1280	1300	1600	1800	500	800	500
21	1500	1400	1150	1050	1000	1300	1200	1600	1800	500	920	750
22	1450	1400	1150	1050	990	1220	1200	1600	1800	700	---	900
23	1450	1400	1100	1050	980	1240	1200	1550	1800	900	650	900
24	1450	1400	1100	1050	1000	1300	1250	1600	1800	1100	660	1000
25	1400	1350	1100	1050	1010	1220	1340	1600	2000	1200	---	1000
26	1400	1300	1100	1050	1020	1200	1390	1600	2000	1250	750	945
27	1400	1300	1100	1050	1020	1220	1300	1600	2000	1400	950	850
28	1400	1300	1100	900	1020	1220	1300	1500	2000	1250	890	900
29	1400	1300	1100	990	---	1300	1300	1500	2000	800	790	910
30	1400	1300	1100	990	---	1300	1400	1500	2000	---	1100	1000
31	1450	---	1100	980	---	1300	---	1600	---	1200	1100	---
MEAN	1500	1360	1150	1040	981	1160	1270	1470	1760	1310	774	1010

YEAR MAX 2250 MIN 420 MEAN 1240

09448500 GILA RIVER AT HEAD OF SAFFORD VALLEY, NEAR SOLOMON, ARIZ.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.0	17.0	13.0	10.0	12.0	19.0	19.0	24.5	25.0	28.0	26.0	21.0
2	26.0	18.0	10.0	8.0	12.0	15.5	18.0	26.5	22.0	29.0	37.0	21.0
3	23.0	18.0	10.0	7.0	12.0	16.0	18.0	25.5	23.0	28.5	23.0	25.0
4	25.5	19.0	11.0	4.5	11.0	16.0	18.0	25.0	24.5	27.5	25.5	27.0
5	25.0	17.0	11.0	8.0	10.5	16.0	20.5	25.0	21.5	28.5	24.0	26.0
6	24.5	17.0	11.0	8.0	9.0	16.0	21.0	22.0	20.5	25.5	26.0	21.0
7	24.5	16.0	11.0	11.0	7.0	15.0	16.0	24.0	21.5	26.5	26.5	29.0
8	24.0	16.0	11.0	11.0	10.0	15.0	16.0	24.0	25.0	21.5	29.0	21.5
9	24.0	15.0	10.0	11.0	10.0	14.0	17.0	22.0	26.5	28.5	27.5	24.0
10	19.0	18.0	11.5	11.0	10.5	15.0	18.0	25.0	27.0	30.0	27.0	29.0
11	20.0	15.0	12.0	6.0	12.0	19.0	19.5	24.0	27.0	29.0	30.0	28.0
12	20.0	18.0	12.0	6.0	10.0	19.0	17.5	24.0	26.5	27.5	25.5	28.0
13	22.0	17.0	12.0	10.0	14.5	19.5	19.5	23.0	---	20.0	27.5	---
14	22.0	16.0	13.0	11.0	13.5	19.0	20.0	20.0	23.0	22.0	27.0	29.0
15	17.0	15.0	13.0	13.0	14.0	20.0	21.0	27.0	25.0	28.5	---	27.0
16	16.0	16.0	12.0	12.0	14.0	19.0	20.5	27.0	26.0	22.5	26.0	21.5
17	22.0	15.0	11.5	9.0	10.5	20.5	21.5	22.0	24.0	27.0	23.0	22.0
18	22.0	13.0	---	13.5	12.0	20.5	20.0	22.0	24.5	27.0	29.0	20.0
19	21.0	12.5	11.0	12.0	11.0	17.5	20.0	22.0	24.5	27.0	28.0	20.0
20	22.0	11.0	11.0	12.0	11.0	17.0	20.5	20.0	24.5	25.0	29.0	24.0
21	21.5	12.0	11.0	7.0	10.0	17.0	21.0	20.0	24.0	26.0	28.5	23.0
22	21.0	13.0	8.0	7.0	9.5	20.5	21.5	23.5	24.5	28.0	---	23.5
23	21.0	14.0	7.0	6.0	10.0	17.0	21.5	23.5	24.5	29.5	27.0	18.0
24	21.0	14.0	8.0	6.0	11.5	19.0	22.0	23.5	22.0	31.0	26.5	19.0
25	20.5	11.0	3.0	12.0	13.0	19.0	19.5	23.5	22.0	28.0	---	24.0
26	20.0	10.0	6.0	11.0	11.0	20.5	23.0	23.0	26.5	25.0	26.5	21.0
27	22.0	10.0	9.0	11.0	14.0	19.0	22.0	22.0	28.0	26.0	22.0	21.0
28	20.0	11.0	9.0	10.5	18.5	20.0	24.5	23.5	27.5	29.0	24.5	23.0
29	17.0	12.0	10.5	11.0	---	20.0	25.5	22.5	28.0	30.0	28.0	24.0
30	16.5	12.0	12.0	11.5	---	19.5	25.5	21.5	28.0	---	29.0	24.0
31	17.0	---	12.0	8.0	---	18.5	---	24.0	---	30.0	27.0	---
MEAN	21.5	14.5	10.5	9.5	11.5	18.0	20.5	23.5	24.5	27.0	27.0	24.0
YEAR	MAX	37.0	MIN	3.0	MEAN	19.5						

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	62	24	4.0	86	12	2.8	88	12	2.8
2	58	40	6.3	78	10	2.1	98	24	6.3
3	60	17	2.8	73	9	1.8	92	21	5.2
4	62	15	2.5	74	10	2.0	100	27	7.3
5	58	15	2.3	72	24	4.7	102	27	7.4
6	66	16	2.6	73	9	1.8	102	16	4.4
7	61	28	4.5	73	10	2.0	98	14	3.7
8	60	19	3.1	72	7	1.4	92	11	2.7
9	56	23	3.5	70	7	1.3	90	11	2.7
10	54	20	2.9	70	8	1.5	92	15	3.7
11	60	19	3.1	70	16	3.0	96	13	3.4
12	66	19	3.4	72	15	2.9	107	28	8.1
13	72	17	3.3	73	10	2.0	111	28	8.4
14	73	13	2.6	73	13	2.6	113	20	6.1
15	68	20	3.6	73	11	2.2	113	20	6.1
16	65	17	3.0	73	7	1.4	109	17	5.0
17	63	18	3.1	72	7	1.4	107	19	5.5
18	63	17	2.9	72	8	1.6	109	20	5.9
19	62	16	2.7	73	10	2.0	109	30	8.8
20	60	10	1.6	80	11	2.4	111	28	8.4
21	60	21	3.4	84	19	4.3	115	21	6.5
22	68	16	2.9	86	11	2.6	118	21	6.7
23	73	14	2.8	88	12	2.9	118	39	12
24	77	13	2.7	90	10	2.4	118	19	6.1
25	77	24	5.0	88	13	3.1	122	18	5.9
26	82	20	4.4	90	19	4.6	129	56	20
27	86	17	3.9	96	20	5.2	129	34	12
28	84	11	2.5	86	10	2.3	127	31	11
29	84	14	3.2	84	12	2.7	124	28	9.4
30	84	13	2.9	84	14	3.2	122	30	9.9
31	88	11	2.6	--	--	--	122	27	8.9
TOTAL	2103	--	100.1	2349	--	76.2	3373	--	220.3

09448500 GILA RIVER AT HEAD OF SAFFORD VALLEY, NEAR SOLOMON, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	124	25	8.4	160	71	31	106	18	5.2
2	132	25	8.9	162	57	25	102	12	3.3
3	136	20	7.3	163	63	28	111	19	5.7
4	136	22	8.1	160	71	31	111	16	4.8
5	141	39	15	159	48	21	104	33	9.3
6	141	29	11	151	44	18	101	28	7.6
7	141	64	24	151	76	31	95	26	6.7
8	146	64	25	150	42	17	95	16	4.1
9	167	62	28	150	54	22	95	14	3.6
10	203	88	48	152	32	13	91	38	9.3
11	192	78	40	150	40	16	91	13	3.2
12	172	86	40	151	43	18	92	45	11
13	169	93	42	154	47	20	94	14	3.6
14	169	90	41	151	37	15	95	13	3.3
15	154	73	30	146	27	11	94	14	3.6
16	156	89	37	132	25	8.9	92	12	3.0
17	164	93	41	121	23	7.5	92	12	3.0
18	159	56	24	123	22	7.3	90	18	4.4
19	163	75	35	126	38	13	91	17	4.2
20	164	72	32	122	40	13	97	14	3.7
21	165	60	27	127	29	9.9	110	21	6.2
22	165	66	29	125	26	8.8	114	17	5.2
23	170	85	39	121	28	9.1	110	8	2.4
24	167	71	32	118	17	5.4	103	10	2.8
25	167	60	27	118	18	5.7	101	20	5.4
26	168	62	28	118	18	5.7	99	9	2.4
27	165	51	23	116	22	6.9	93	9	2.3
28	163	63	28	114	25	7.7	91	14	3.4
29	160	61	26	--	--	--	91	12	2.9
30	158	53	23	--	--	--	85	22	5.0
31	160	53	23	--	--	--	76	12	2.5
TOTAL	4937	--	850.7	3891	--	425.9	3012	--	143.1

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	74	10	2.0	72	38	7.4	45	31	3.8
2	79	6	1.3	68	29	5.3	45	36	4.4
3	87	14	3.3	65	21	3.7	44	53	6.3
4	97	14	3.7	63	16	2.7	43	55	6.4
5	101	14	3.8	62	25	4.2	38	47	4.8
6	97	14	3.7	62	41	6.9	36	39	3.8
7	93	12	3.0	63	41	7.0	36	78	7.6
8	93	14	3.5	63	46	7.8	36	46	4.5
9	91	22	5.4	60	49	7.9	36	52	5.1
10	91	21	5.2	58	42	6.6	36	44	4.3
11	93	14	3.5	54	29	4.2	38	60	6.2
12	93	11	2.8	54	29	4.2	36	56	5.4
13	93	12	3.0	58	30	4.7	34	75	6.9
14	91	27	6.6	56	25	3.8	35	94	8.9
15	93	12	3.0	52	24	3.4	36	71	6.9
16	93	12	3.0	51	24	3.3	36	76	7.4
17	91	15	3.7	51	31	4.3	33	42	3.7
18	87	19	4.5	51	39	5.4	32	26	2.2
19	83	26	5.8	51	28	3.9	31	44	3.7
20	78	28	5.9	51	27	3.7	32	31	2.7
21	78	26	5.5	51	22	3.0	31	41	3.4
22	80	29	6.3	51	20	2.8	30	30	2.4
23	84	39	8.8	48	28	3.6	30	36	2.9
24	78	25	5.2	42	24	2.7	28	37	2.8
25	76	31	6.4	44	27	3.2	28	52	3.9
26	72	26	5.1	42	22	2.5	29	40	3.1
27	74	24	4.8	38	21	2.2	29	32	2.5
28	76	25	5.1	38	36	3.7	28	31	2.3
29	78	33	6.9	43	42	4.9	28	30	2.3
30	77	25	5.2	44	56	6.7	27	30	2.2
31	--	--	--	45	48	5.8	--	--	--
TOTAL	2571	--	136.0	1651	--	141.5	1026	--	132.8

09448500 GILA RIVER AT HEAD OF SAFFORD VALLEY, NEAR SOLOMON, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	31	48	4.0	160	10000	4320	105	8500	241
2	38	56	5.7	166	8100	3630	97	500	131
3	36	76	7.4	260	6350	5290	100	550	148
4	33	57	5.1	349	12300	11600	72	190	37
5	28	53	4.0	1330	36300	156000	64	116	20
6	50	197	38	923	29000	75500	139	9330	3740
7	56	1440	218	982	19800	56000	111	14700	4410
8	57	890	137	684	8400	15500	99	8450	2260
9	57	480	74	700	8200	15700	86	2600	604
10	47	320	41	518	6500	9890	68	700	128
11	38	270	28	378	4700	4800	61	292	48
12	34	250	23	282	1300	990	58	205	32
13	32	250	22	218	700	412	85	600	138
14	70	2330	1160	170	600	275	84	600	136
15	166	3170	3080	200	1560	1420	81	450	98
16	843	40200	114000	1560	23700	122000	92	3800	944
17	424	18600	21600	440	13400	16200	95	4450	1140
18	303	9850	8060	297	6300	5050	96	5300	1370
19	209	4400	2480	216	3600	2100	292	31400	31600
20	1080	29800	101000	227	2800	1720	241	14800	11600
21	535	11300	16700	182	2900	1430	211	4200	2390
22	323	5600	4880	147	4400	1750	167	3000	1350
23	221	2900	1730	102	9700	2670	145	2100	822
24	150	1500	608	248	9750	6410	143	790	305
25	113	600	183	461	11600	15700	143	690	266
26	97	327	86	241	7600	4950	159	1830	786
27	81	376	82	193	4300	2240	182	3620	1780
28	89	1500	360	147	4150	1650	163	2600	1140
29	81	5400	1180	171	4050	1870	158	1250	533
30	87	5400	1270	175	5000	2360	138	480	179
31	220	1900	1130	118	2500	796	--	--	--
TOTAL	5629	--	280196.2	12245	--	549423	3735	--	68376

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 46522
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 900221.8

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ANALYSES MADE IN DISTILLED WATER)

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
JULY								
20...	1220	740	25.0	35400	70700	46	58	91
AUG.								
05...	1100	2380	24.0	63900	411000	33	43	69
24...	1805	386	26.5	8730	9100	49	62	93

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
JULY							
20...	--	100	--	--	--	--	--
AUG.							
05...	--	89	--	92	97	99	100
24...	99	--	100	--	--	--	--

09471000 SAN PEDRO RIVER AT CHARLESTON, ARIZ.

LOCATION.--Lat 31°37'33", long 110°10'26", in NE¼NE¼ sec.11. T.21 S., R.21 E., Cochise County, at gaging station in Spanish land grant of San Juan de las Boquillas y Nogales, at county highway bridge, 0.3 mi (0.5 km) south of Charleston, 1.5 mi (2.4 km) upstream from Charleston damsite, and 9 mi (14 km) upstream from Babocomari River.

DRAINAGE AREA.--1,219 mi^2 (3,157 km^2), of which 696 mi^2(1,903 km^2) is in Mexico.

PERIOD OF RECORD.--Specific conductance: October 1964 to current year.
Water temperatures: July 1963 to current year.
Sediment records: July 1963 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 850 micromhos Jan. 11; minimum daily, 220 micromhos Aug. 19.
Water temperatures: Maximum, 33.0°C June 19; minimum, 0.0°C Feb. 8, 9, 10.
Sediment concentrations: Maximum daily, 28,000 mg/l July 8; minimum daily, 3.0 mg/l Oct. 38.
Sediment discharge: Maximum daily, 250,000 tons (227,000 tonnes) July 20; minimum daily, 0.02 ton (0.02 tonne) June 13.

Period of record:
Specific conductance: Maximum daily, 1,550 micromhos Dec. 22, 1967; minimum daily, 140 micromhos Mar. 18, 1969.
Water temperatures: Maximum, 36.0°C July 12, 1968; minimum, freezing point on several days during 1964-68, 1970, 1971, 1974.
Sediment concentrations: Maximum daily, 30,600 mg/l July 29, 1966; minimum daily, 1.0 mg/l May 27, 28, 31, June 1, 2, 1966, Oct. 23, 24, Nov. 2, 12, 1969.
Sediment discharge: Maximum daily, 410,000 tons (372,000 tonnes) Aug. 14, 1964; minimum daily, 0.01 ton (0.01 tonne) July 3, 6, 7, 1969, July 10, 1971, June 22, 1973.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	440	400	400	400	360	360	350	360	350	350	360
2	430	420	400	450	400	360	---	360	360	340	260	360
3	360	440	440	420	360	360	---	360	350	390	240	375
4	---	400	450	440	350	360	---	390	330	820	250	300
5	360	410	400	390	370	360	---	380	350	650	270	370
6	410	410	440	390	400	360	360	370	360	440	270	370
7	370	350	450	390	360	350	360	400	390	410	340	350
8	380	410	400	410	360	350	360	420	350	400	390	400
9	380	440	380	410	410	350	320	---	350	240	300	400
10	350	400	380	450	360	350	340	400	330	355	400	350
11	400	430	430	850	360	350	370	400	330	360	360	370
12	360	430	450	575	360	400	360	---	330	360	360	350
13	360	450	410	450	360	360	350	400	380	360	390	350
14	380	440	400	430	360	---	340	400	350	300	380	370
15	350	440	400	400	360	360	340	---	350	390	380	390
16	390	450	400	450	360	360	350	---	340	360	310	390
17	390	440	410	430	360	360	340	---	350	360	550	350
18	390	440	410	450	370	360	340	---	350	370	260	350
19	400	450	410	400	360	370	340	380	350	350	220	330
20	400	450	410	400	410	360	340	400	350	290	400	360
21	400	450	430	400	370	360	340	400	350	280	400	280
22	400	450	400	400	370	350	340	400	350	350	400	360
23	---	440	390	450	370	350	400	400	300	390	300	360
24	400	---	450	450	370	350	360	400	450	405	400	350
25	400	460	400	420	375	350	360	370	---	390	390	---
26	390	455	415	440	360	350	395	360	390	360	390	360
27	440	---	380	440	360	355	350	360	350	290	340	400
28	420	---	390	440	360	360	390	410	350	260	360	350
29	385	350	400	340	---	360	340	310	340	310	360	370
30	380	380	400	340	---	360	340	320	340	400	360	350
31	430	---	440	400	---	360	---	350	---	300	360	---
MEAN	388	429	412	436	370	358	353	380	353	376	346	359
YEAR	MAX	850	MIN	220	MEAN	380						

09471000 SAN PEDRO RIVER AT CHARLESTON, ARIZ.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.5	8.5	6.0	5.0	11.0	20.0	7.0	9.5	26.5	26.5	26.0	23.0
2	18.0	19.0	8.0	6.0	3.0	9.0	---	14.0	12.5	19.5	23.5	19.5
3	11.0	9.5	9.0	9.0	2.5	10.0	---	11.0	19.0	26.5	21.0	26.0
4	---	11.5	14.0	14.0	2.0	5.0	---	17.5	13.0	27.0	22.0	20.0
5	12.0	12.0	7.5	6.0	4.0	5.0	---	9.0	19.0	27.5	19.0	22.0
6	16.0	6.0	13.0	7.0	3.0	3.5	18.0	14.0	21.5	20.0	21.0	19.0
7	12.5	10.0	14.0	5.5	3.0	9.5	8.0	24.0	31.0	23.0	21.0	24.0
8	14.5	21.0	2.5	8.0	0.0	7.0	13.0	19.0	15.0	23.5	23.0	18.0
9	11.0	8.5	3.0	8.0	0.0	8.0	9.0	---	20.5	23.0	21.0	22.0
10	14.0	8.0	3.0	5.5	0.0	4.0	12.0	23.0	15.0	25.0	22.0	18.0
11	15.0	8.0	4.0	2.0	4.0	6.5	22.0	22.5	31.0	20.5	19.0	22.0
12	13.0	7.0	4.0	3.0	5.0	7.0	23.0	---	15.5	18.5	22.0	23.5
13	7.0	9.0	4.0	7.0	7.0	10.0	8.0	23.5	26.0	22.0	19.5	21.0
14	12.5	11.0	3.5	6.0	14.0	---	11.0	20.0	18.0	19.0	23.5	22.0
15	15.5	6.0	4.0	3.0	11.5	24.0	8.0	---	25.5	22.5	21.5	22.0
16	21.0	4.0	3.0	5.5	2.5	7.0	13.0	---	17.0	19.0	24.0	19.0
17	21.0	5.5	3.5	14.0	6.0	9.5	8.0	---	21.0	23.0	20.0	18.5
18	22.0	5.5	3.0	14.0	5.0	8.5	13.0	---	21.0	21.5	22.0	14.5
19	22.0	7.0	2.0	4.0	8.5	19.0	10.5	18.5	33.0	22.0	19.5	16.0
20	21.0	5.0	10.0	5.5	5.0	11.0	16.0	24.0	28.5	20.0	24.0	15.0
21	9.0	5.0	11.5	7.5	5.0	16.0	10.5	26.5	18.0	21.0	19.0	16.0
22	12.0	5.0	1.0	4.0	1.0	8.0	16.0	23.0	23.0	21.0	22.5	15.0
23	---	15.0	4.5	2.5	2.5	9.0	14.0	23.5	20.0	22.0	18.5	19.0
24	19.0	---	3.0	5.0	2.0	8.0	19.0	24.0	28.0	26.5	25.0	14.5
25	19.0	4.0	1.0	2.5	9.5	10.5	19.0	12.0	---	25.0	18.0	---
26	19.0	7.0	4.5	6.0	5.0	8.0	22.0	17.0	27.5	21.0	22.5	20.5
27	8.5	---	4.0	5.0	6.0	24.0	9.0	14.5	25.0	24.5	17.5	23.5
28	11.0	---	2.5	6.0	20.5	10.5	18.0	23.0	21.0	21.0	25.5	15.0
29	17.0	13.0	4.0	2.0	---	12.0	9.0	15.0	24.0	23.0	27.5	16.5
30	11.0	4.0	4.5	4.0	---	8.0	17.0	22.0	20.0	22.0	27.0	14.0
31	9.0	---	4.0	13.0	---	12.0	---	12.0	---	24.0	17.0	---
MEAN	14.5	8.5	5.5	6.0	5.5	10.5	13.5	18.5	22.0	22.5	22.0	19.5

YEAR MAX 33.0 MIN 0.0 MEAN 14.0

09471000 SAN PEDRO RIVER AT CHARLESTON, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SPETEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.4	15	.06	5.5	6	.09	10	47	1.3
2	1.2	48	.16	6.2	11	.18	10	50	1.4
3	1.1	18	.05	6.6	10	.18	10	38	1.0
4	1.3	15	.05	7.0	22	.42	10	79	2.1
5	1.4	11	.04	7.5	76	1.5	10	65	1.8
6	1.4	9	.03	7.0	14	.26	10	67	1.8
7	1.4	12	.05	8.0	15	.32	10	28	.76
8	1.3	12	.04	8.0	8	.17	10	71	1.9
9	1.3	11	.04	8.5	8	.18	10	70	1.9
10	1.4	18	.07	8.5	19	.44	10	31	.84
11	2.2	10	.06	9.0	7	.17	10	13	.35
12	3.0	16	.13	9.0	6	.15	10	28	.76
13	2.8	18	.14	9.0	9	.22	11	17	.50
14	2.8	15	.11	9.0	7	.17	10	19	.51
15	3.0	13	.11	9.5	12	.31	11	19	.56
16	3.0	7	.06	10	8	.22	11	18	.53
17	3.0	9	.07	10	17	.46	11	22	.65
18	3.2	5	.04	11	15	.45	11	23	.68
19	3.2	8	.07	10	27	.73	10	22	.59
20	3.4	24	.22	10	24	.65	10	27	.73
21	3.4	9	.08	10	32	.86	11	19	.56
22	4.2	13	.15	11	18	.53	11	15	.45
23	3.8	13	.13	11	35	1.0	11	16	.48
24	4.2	14	.16	10	45	1.2	11	27	.80
25	4.2	6	.07	9.5	52	1.3	11	19	.56
26	4.5	4	.05	9.5	34	.87	11	18	.53
27	5.3	7	.10	9.0	40	.97	10	19	.51
28	4.8	3	.04	9.0	45	1.1	11	21	.62
29	4.5	13	.16	9.5	51	1.3	11	96	2.9
30	4.8	15	.19	9.5	74	1.9	12	84	2.7
31	5.0	8	.11	--	--	--	12	38	1.2
TOTAL	91.5	--	2.84	267.3	--	18.30	327	--	31.97

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	12	36	1.2	12	62	2.0	12	68	1.9
2	13	34	1.2	13	40	1.4	12	73	2.4
3	13	28	.98	13	40	1.4	11	50	1.5
4	12	51	1.7	13	32	1.1	12	47	1.5
5	12	69	2.2	13	59	2.1	12	38	1.2
6	12	50	1.6	12	41	1.3	12	40	1.3
7	12	35	1.1	12	47	1.5	12	58	1.9
8	13	31	1.1	12	20	.65	12	75	2.4
9	18	111	5.4	13	133	4.7	12	75	2.4
10	26	850	60	12	115	3.7	12	105	3.4
11	22	1350	80	12	85	2.8	12	63	2.0
12	15	310	13	12	63	2.0	12	116	3.8
13	14	220	8.3	12	46	1.5	12	63	2.0
14	13	130	4.6	12	48	1.6	12	75	2.4
15	12	95	3.1	12	40	1.3	12	112	3.6
16	12	136	4.4	11	56	1.7	12	88	2.8
17	12	126	4.1	12	72	2.3	13	75	2.6
18	12	86	2.8	11	53	1.6	13	64	2.2
19	11	91	2.7	11	36	1.1	13	53	1.9
20	11	79	2.3	11	24	.71	12	121	3.9
21	11	83	2.5	11	42	1.2	12	55	1.8
22	11	45	1.3	11	42	1.2	12	57	1.8
23	12	18	.58	12	78	2.5	12	77	2.5
24	12	26	.84	12	70	2.3	12	66	2.1
25	12	32	1.0	12	76	2.5	12	60	1.9
26	12	32	1.0	12	70	2.3	12	51	1.7
27	12	28	.91	12	72	2.3	12	90	2.9
28	12	38	1.2	12	74	2.4	12	76	2.5
29	12	50	1.6	--	--	--	12	51	1.7
30	12	42	1.4	--	--	--	12	71	2.3
31	12	36	1.2	--	--	--	12	74	2.4
TOTAL	407	--	215.31	335	--	53.16	374	--	70.7

09471000 SAN PEDRO RIVER AT CHARLESTON, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	12	35	1.1	8.5	38	.87	1.7	38	.17
2	12	40	1.3	8.5	38	.87	1.4	9	.03
3	12	50	1.6	9.0	38	.92	1.0	42	.11
4	14	60	2.3	8.5	23	.53	1.2	12	.04
5	14	70	2.6	9.0	44	1.1	1.1	22	.07
6	13	74	2.6	9.5	29	.74	1.1	13	.04
7	12	34	1.1	9.5	26	.67	.80	13	.03
8	12	25	.81	10	85	2.3	.90	17	.04
9	12	38	1.2	10	50	1.4	1.0	31	.08
10	12	25	.81	10	21	.57	1.2	11	.04
11	12	55	1.8	9.5	22	.56	1.2	15	.05
12	13	62	2.2	9.0	15	.36	1.2	32	.10
13	12	68	1.9	9.5	12	.31	1.2	5	.02
14	11	60	1.8	9.0	16	.39	1.2	10	.03
15	11	68	2.0	10	20	.54	1.3	20	.07
16	10	71	1.9	10	20	.54	1.7	25	.11
17	10	67	1.8	9.5	25	.64	1.4	10	.04
18	9.5	84	2.2	9.0	25	.61	1.3	41	.14
19	9.5	55	1.4	6.2	33	.55	1.3	102	.36
20	9.0	51	1.2	8.5	12	.28	1.4	24	.09
21	8.0	87	1.9	6.0	18	.29	1.5	30	.12
22	8.0	25	.54	5.0	16	.22	1.5	11	.04
23	8.0	29	.63	3.2	34	.29	1.5	7	.03
24	8.5	54	1.2	3.2	25	.22	1.7	10	.05
25	9.0	36	.87	3.0	13	.11	2.2	30	.18
26	9.5	89	2.3	2.3	14	.09	4.2	48	.54
27	9.5	28	.72	1.0	15	.04	2.3	26	.16
28	9.0	32	.78	2.5	16	.11	1.7	17	.08
29	8.0	43	.93	2.0	31	.17	1.5	17	.07
30	8.5	32	.73	1.5	16	.06	2.2	13	.08
31	--	--	--	1.7	18	.08	--	--	--
TOTAL	318.0	--	44.22	214.1	--	16.43	44.90	--	3.01

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.2	15	.17	109	1400	412	10	94	2.5
2	50	453	158	815	11000	29700	11	94	2.8
3	49	919	127	1000	13100	41300	42	7740	1830
4	30	430	35	1110	11800	52400	39	10100	1060
5	8.3	150	3.4	1950	10300	107000	22	1400	83
6	2.3	72	.45	928	15600	48300	18	359	17
7	245	19000	16600	165	3200	1430	18	125	6.1
8	411	25600	28200	152	4910	2280	18	899	44
9	65	5000	878	60	2600	421	12	169	5.5
10	20	600	32	39	700	74	11	74	2.2
11	6.5	210	4.8	26	243	17	11	55	1.6
12	9.0	180	4.4	22	188	11	11	17	.50
13	12	681	20	18	83	4.0	13	230	8.1
14	18	2860	137	18	44	2.1	22	1200	71
15	8.0	460	9.9	15	184	7.5	22	3450	205
16	10	302	13	50	3070	457	20	1200	65
17	14	392	18	56	1960	878	13	126	4.4
18	35	3030	801	295	7190	13000	30	732	147
19	715	19700	47600	92	4070	1580	18	1150	56
20	3410	21400	258000	26	1600	112	42	2540	749
21	413	4500	5020	20	400	22	34	5400	519
22	221	1700	1010	48	3840	1040	18	800	39
23	77	484	101	46	5100	633	13	164	5.8
24	33	93	8.3	26	1100	77	15	123	5.0
25	18	117	5.7	22	249	15	18	200	9.7
26	10	40	1.1	20	132	7.1	15	499	20
27	392	9110	14500	18	86	4.2	20	5780	396
28	225	5120	4150	13	88	3.1	20	1700	92
29	183	2500	3400	11	188	5.6	12	434	14
30	2190	16000	147000	10	102	2.8	10	294	7.9
31	394	6650	8340	10	48	1.3	--	--	--
TOTAL	9280.3	--	528178.22	7190	--	301196.7	578	--	5469.10

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 19427.10
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 835299.96

09471800 SAN PEDRO RIVER NEAR BENSON, ARIZ.

LOCATION.--Lat 32°07'35", long 110°17'22", in SW¼ sec.15, T.15 S., R.20 E., Cochise County, at gaging station 6 mi (10 km) downstream from Tres Alamos Wash, and 11 mi (18 km) north of Benson.

DRAINAGE AREA.--2,500 mi^2 (6,475 km^2), of which 696 mi^2 (1,803 km^2) is in Mexico.

PERIOD OF RECORD.--Sediment records: March 1966 to current year.

EXTREMES.--Current year:
Sediment concentrations: Maximum daily, 136,000 mg/l July 20; minimum daily, no flow on many days.
Sediment discharge: Maximum daily, 1,260,000 tons (1,140,000 tonnes) July 20; minimum daily, 0 ton (0 tonne) on many days.

Period of record:
Sediment concentrations (1968-74): Maximum daily, 136,000 mg/l July 20, 1974; minimum daily, no flow on many days each year.
Sediment discharge (1968-74): Maximum daily, 1,260,000 tons (1,140,000 tonnes) July 20, 1974; minimum daily, 0 ton (0 tonne) on many days each year.

REMARKS.--Records of temperature and specific conductance of individual samples available in district office at Tucson, Ariz. No flow many days each year.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--
TOTAL	0	--	0	0	--	0	0	--	0

09471800 SAN PEDRO RIVER NEAR BENSON, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 to SEPTEMBER 1974

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--
TOTAL	0	--	0	0	--	0	0	--	0

09471800 SAN PEDRO RIVER NEAR BENSON, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--
TOTAL	0	--	0	0	--	0	0	--	0

09471800 SAN PEDRO RIVER NEAR BENSON, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	234	23400	14800	.20	500	.30
2	0	0	0	932	34800	87600	.10	200	.10
3	0	0	0	698	32000	60300	.90	2000	4.8
4	0	0	0	693	31900	59700	36	13300	1290
5	0	0	0	1540	40100	167000	14	36200	1370
6	0	0	0	883	34200	81500	2.9	4000	31
7	0	0	0	399	27500	29400	.10	200	.10
8	220	41100	24400	106	18700	5350	0	0	0
9	177	37400	17900	103	13000	3620	0	0	0
10	20	14500	783	25	14500	978	0	0	0
11	0	0	0	3.1	7000	58	0	0	0
12	0	0	0	.30	1400	1.1	0	0	0
13	0	0	0	0	0	0	0	0	0
14	15	12800	518	0	0	0	0	0	0
15	240	43300	29000	4.5	900	11	1.2	2000	6.5
16	83	26900	6030	13	10200	358	0	0	0
17	0	0	0	2.1	5000	28	.10	500	.10
18	384	52400	54300	21	11700	663	14	8950	338
19	276	45400	33800	438	37500	48900	50	15300	2060
20	3430	136000	1260000	191	26100	13400	302	40700	33200
21	490	58200	77000	16	12300	531	133	23000	8260
22	90	30300	7360	.50	13500	18	41	14100	1560
23	10	10700	289	3.5	5000	47	0	0	0
24	5.0	5000	68	60	15900	2580	0	0	0
25	0	0	0	8.2	7000	155	71	17700	3390
26	185	38200	19100	3.9	5000	53	33	12000	1140
27	271	45000	32900	2.0	4000	30	22	10000	642
28	107	30100	8700	1.6	2000	8.6	5.0	5000	68
29	379	52100	53300	.90	1000	2.4	3.0	3000	24
30	612	64200	106000	.60	1000	1.6	2.0	1000	5.4
31	1060	81400	233000	.40	500	.50	--	--	--
TOTAL	8062.0	--	1964448	6384.40	--	577094.20	731.50	--	53390.30

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 15177.90
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 2594932.50

09473500 SAN PEDRO RIVER AT WINKELMAN, ARIZ.

LOCATION.--Lat 32°58'38", long 110°46'11", in SE¼SW¼ sec.24, T.5 S., R.15 E., Pinal County, at gaging station 0.7 mi (1.1 km) south of Winkelman, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--4,471 mi^2 (11,580 km^2), of which 696 mi^2 (1,803 km^2) is in Mexico.

PERIOD OF RECORD.--Specific conductance: January 1966 to current year.
Water temperatures: January 1966 to current year.
Sediment records: January 1966 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 1,650 micromhos Apr. 1; minimum daily, 445 micromhos Aug. 4.
Water temperatures: Maximum, 40.0°C Sept. 9, Aug. 24; minimum, 13.0°C Dec. 23.
Sediment concentrations: Maximum daily, 92,600 mg/l July 16; minimum daily, no flow on many days.
Sediment discharge: Maximum daily, 447,000 tons (406,000 tonnes) July 21; minimum daily, 0 ton (0 tonne) on many days.

Period of record:
Specific conductance: Maximum daily, 2,050 micromhos Sept. 15, 1969; minimum daily, 300 micromhos Oct. 4, 1970.
Water temperatures: Maximum, 42.0°C Sept. 10, 1968; minimum, 2.0°C Dec. 31, 1966.
Sediment concentrations: Maximum daily, 138,000 mg/l June 14, 1972; minimum daily, no flow on many days.
Sediment discharge: Maximum daily, 961,000 tons (872,000 tonnes) Dec. 20, 1967; minimum daily, 0 ton (0 tonne) on many days.

REMARKS.--No flow many days each year.

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	1400	1300	1410	1650	---	---	---	475	1500
2	---	---	---	1400	1300	1400	1500	---	---	---	508	1400
3	---	---	---	1400	1300	1400	1500	---	---	---	477	1500
4	---	---	1250	1400	1300	1400	1440	---	---	---	445	1000
5	---	---	1250	1400	1300	1400	1400	---	---	---	507	1400
6	---	---	1350	1400	1350	1400	1410	---	---	---	440	550
7	---	---	1350	1300	1350	1400	1400	---	---	---	500	1600
8	---	---	1350	1300	1350	1390	1410	---	---	---	580	1400
9	---	---	1350	1200	1350	1390	1390	---	---	---	800	1400
10	---	---	1350	1000	1350	1400	1450	---	---	---	980	1300
11	---	---	1350	1200	1350	1400	1460	---	---	---	1090	1300
12	---	---	1350	1200	1350	1400	1500	---	---	---	1200	---
13	---	---	1350	1300	1350	1400	1510	---	---	1200	1210	---
14	---	---	1350	1300	1350	1400	1490	---	---	826	1220	---
15	---	---	1350	1300	1350	1500	1520	---	---	850	1390	---
16	---	---	1350	1300	1350	1400	1590	---	---	550	645	---
17	---	---	1350	1300	1350	1400	1600	---	---	570	1000	---
18	---	---	1350	1300	1350	1550	1610	---	---	775	1500	---
19	---	---	1350	1300	1350	1550	1620	---	---	615	1500	---
20	---	---	1400	1300	1300	1550	1610	---	---	590	635	1000
21	---	---	1400	1300	1300	1420	1620	---	---	525	600	800
22	---	---	1400	1350	1300	1420	1610	---	---	535	1020	550
23	---	---	1400	1350	1300	1420	1610	---	---	670	1200	820
24	---	---	1400	1350	1400	1420	1580	---	---	855	1100	1200
25	---	---	1400	1350	1400	1420	1580	---	---	800	1400	675
26	---	---	1400	1350	1300	1420	1580	---	---	1100	1400	1100
27	---	---	1400	1350	1370	1420	---	---	---	590	1400	890
28	---	---	1400	1350	1370	1420	---	---	---	645	1400	1150
29	---	---	1400	1350	---	1420	---	---	---	850	1400	1210
30	---	---	1400	1300	---	1500	---	---	---	600	1400	1300
31	---	---	1400	1300	---	1500	---	---	---	480	1400	---
MEAN	---	---	1360	1310	1340	1430	1520	---	---	---	996	---

YEAR MAX 1650 MIN 445 MEAN 1250

09473500 SAN PEDRO RIVER AT WINKELMAN, ARIZ.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	19.0	20.0	25.0	28.0	---	---	---	31.5	38.0
2	---	---	---	15.0	13.0	21.0	26.0	---	---	---	28.5	28.0
3	---	---	20.0	18.0	24.0	24.0	26.0	---	---	---	32.0	38.0
4	---	---	21.0	19.0	24.0	20.0	24.5	---	---	---	30.0	37.0
5	---	---	21.0	20.0	19.5	28.0	30.0	---	---	---	29.0	37.0
6	---	---	20.0	19.0	21.0	27.0	30.0	---	---	---	29.0	38.0
7	---	---	19.0	14.5	20.0	28.0	31.0	---	---	---	29.5	39.0
8	---	---	23.0	18.0	21.0	18.0	33.0	---	---	---	31.0	37.0
9	---	---	23.0	18.0	20.0	19.0	28.0	---	---	---	30.0	40.0
10	---	---	20.0	18.0	23.0	27.0	27.0	---	---	---	32.0	38.0
11	---	---	23.0	19.0	25.0	29.0	28.0	---	---	---	38.0	37.0
12	---	---	22.0	23.0	18.0	29.0	30.0	---	---	---	37.0	---
13	---	---	22.0	24.0	24.0	28.0	29.0	---	---	30.0	39.0	---
14	---	---	20.0	23.0	25.0	30.0	34.0	---	---	29.0	39.0	---
15	---	---	20.0	24.0	26.0	30.0	33.0	---	---	30.0	39.0	---
16	---	---	21.0	25.0	26.0	---	31.0	---	---	34.0	30.0	---
17	---	---	23.0	20.0	20.0	28.0	33.0	---	---	29.5	26.0	---
18	---	---	18.0	23.0	24.0	27.0	30.0	---	---	30.0	37.0	---
19	---	---	18.0	25.0	25.0	23.0	30.0	---	---	27.5	39.0	---
20	---	---	18.0	25.0	19.0	23.0	32.0	---	---	30.5	35.0	34.0
21	---	---	20.0	20.0	24.0	23.0	33.0	---	---	28.0	25.0	25.0
22	---	---	15.0	21.0	25.0	29.0	33.0	---	---	32.0	36.0	30.0
23	---	---	13.0	20.0	26.0	27.0	30.0	---	---	31.0	39.0	20.0
24	---	---	15.0	20.0	25.0	24.0	29.0	---	---	28.0	32.0	37.0
25	---	---	18.0	24.0	25.0	31.0	26.0	---	---	25.0	38.0	31.0
26	---	---	18.0	23.0	27.0	24.0	28.0	---	---	26.0	39.0	34.0
27	---	---	20.0	24.0	25.0	29.0	---	---	---	29.0	39.0	31.0
28	---	---	20.0	21.0	29.0	29.0	---	---	---	31.5	38.0	29.0
29	---	---	20.0	24.0	---	28.0	---	---	---	26.0	38.0	36.0
30	---	---	20.0	25.0	---	21.0	---	---	---	30.0	38.0	37.0
31	---	---	19.0	25.0	---	30.0	---	---	---	29.5	30.0	---
MEAN	---	---	19.5	21.0	23.0	26.0	29.5	---	---	---	34.0	---
YEAR	MAX	40.0	MIN	13.0	MEAN	27.0						

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	--	--	--	0	0	0	1.5	50	.20
2	--	--	--	0	0	0	1.5	50	.20
3	--	--	--	0	0	0	1.5	75	.30
4	--	--	--	0	0	0	1.5	54	.22
5	--	--	--	0	0	0	1.6	76	.33
6	--	--	--	0	0	0	1.1	89	.26
7	--	--	--	0	0	0	1.1	74	.22
8	--	--	--	0	0	0	.70	66	.12
9	--	--	--	0	0	0	.60	86	.14
10	--	--	--	0	0	0	.90	60	.15
11	--	--	--	0	0	0	1.1	75	.22
12	--	--	--	0	0	0	.90	77	.19
13	--	--	--	0	0	0	1.3	65	.23
14	--	--	--	0	0	0	1.3	69	.24
15	--	--	--	0	0	0	1.3	63	.22
16	--	--	--	0	0	0	1.3	80	.28
17	--	--	--	0	0	0	1.3	84	.29
18	--	--	--	0	0	0	1.6	95	.41
19	--	--	--	0	0	0	1.6	80	.35
20	--	--	--	0	0	0	1.3	74	.26
21	--	--	--	0	0	0	1.3	84	.29
22	--	--	--	0	0	0	1.9	125	.64
23	--	--	--	0	0	0	2.2	155	.92
24	--	--	--	0	0	0	2.2	122	.72
25	--	--	--	0	0	0	2.2	100	.59
26	--	--	--	0	0	0	2.2	143	.85
27	--	--	--	.70	50	.09	2.2	99	.59
28	--	--	--	2.2	100	.59	2.6	101	.71
29	--	--	--	2.2	90	.53	3.0	116	.94
30	--	--	--	1.5	75	.30	3.0	115	.93
31	--	--	--	--	--	--	3.4	132	1.2
TOTAL	0	--	0	6.60	--	1.51	51.20	--	13.21

09473500 SAN PEDRO RIVER AT WINKELMAN, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.9	168	1.7	3.9	136	1.4	3.0	92	.74
2	3.9	144	1.5	3.9	148	1.6	3.4	84	.77
3	3.9	148	1.6	3.4	117	1.1	3.9	119	1.3
4	3.9	160	1.7	4.4	123	1.5	3.0	118	.96
5	3.9	211	2.2	4.4	128	1.5	3.9	116	1.2
6	4.4	182	2.2	3.9	124	1.3	4.9	112	1.5
7	4.4	280	3.3	3.9	125	1.3	4.4	93	1.1
8	4.9	335	4.4	3.9	145	1.5	4.9	129	1.7
9	4.9	480	24	3.4	121	1.1	7.5	157	3.2
10	39	2260	238	2.2	122	.72	8.2	108	2.4
11	9.0	860	21	3.9	106	1.1	7.5	122	2.5
12	5.5	295	4.4	3.9	141	1.5	6.8	143	2.6
13	4.4	310	3.7	4.4	112	1.3	6.1	155	2.6
14	3.4	253	2.3	4.9	141	1.9	5.5	96	1.4
15	3.4	217	2.0	5.5	125	1.9	5.5	57	.84
16	3.4	244	2.2	6.1	106	1.7	4.9	52	.69
17	3.4	175	1.6	6.8	86	1.6	3.4	53	.49
18	3.4	201	1.8	6.1	81	1.3	2.2	39	.23
19	3.4	212	1.9	7.5	149	3.0	2.6	34	.24
20	3.4	111	1.0	8.2	116	2.6	5.5	49	.73
21	3.4	133	1.2	9.0	78	1.9	6.1	74	1.2
22	3.4	148	1.4	9.0	84	2.0	6.8	66	1.2
23	3.9	124	1.3	7.5	86	1.7	6.8	59	1.1
24	3.9	127	1.3	6.8	83	1.5	6.8	101	1.9
25	3.9	124	1.3	6.8	97	1.8	6.1	87	1.4
26	3.9	127	1.3	7.5	92	1.9	5.5	87	1.3
27	3.9	141	1.5	5.5	100	1.5	5.5	72	1.1
28	3.4	115	1.1	3.4	90	.83	5.5	79	1.2
29	3.9	144	1.5	--	--	--	5.5	73	1.1
30	3.9	155	1.6	--	--	--	5.5	142	2.1
31	3.9	122	1.3	--	--	--	5.5	86	1.3
TOTAL	166.2	--	337.3	150.1	--	44.05	162.7	--	42.09

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.1	46	.76	--	--	--	--	--	--
2	6.1	93	1.5	--	--	--	--	--	--
3	4.4	109	1.3	--	--	--	--	--	--
4	3.4	50	.46	--	--	--	--	--	--
5	3.0	65	.53	--	--	--	--	--	--
6	2.6	52	.36	--	--	--	--	--	--
7	2.2	50	.30	--	--	--	--	--	--
8	1.9	65	.33	--	--	--	--	--	--
9	.70	70	.13	--	--	--	--	--	--
10	.40	72	.08	--	--	--	--	--	--
11	.90	18	.04	--	--	--	--	--	--
12	1.1	42	.12	--	--	--	--	--	--
13	1.1	16	.05	--	--	--	--	--	--
14	.90	75	.18	--	--	--	--	--	--
15	.70	28	.05	--	--	--	--	--	--
16	.60	40	.06	--	--	--	--	--	--
17	.20	42	.02	--	--	--	--	--	--
18	.10	12	0	--	--	--	--	--	--
19	.10	47	.01	--	--	--	--	--	--
20	.10	49	.01	--	--	--	--	--	--
21	.10	27	.01	--	--	--	--	--	--
22	.10	30	.01	--	--	--	--	--	--
23	.10	60	.02	--	--	--	--	--	--
24	.20	119	.06	--	--	--	--	--	--
25	.90	167	.40	--	--	--	--	--	--
26	.70	146	.28	--	--	--	--	--	--
27	.30	50	.04	--	--	--	--	--	--
28	.30	50	.04	--	--	--	--	--	--
29	.20	28	.01	--	--	--	--	--	--
30	0	0	0	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--
TOTAL	39.50	--	7.16	0	--	0	0	--	0

09473500 SAN PEDRO RIVER AT WINKELMAN, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	249	49000	32900	.70	181	.34
2	0	0	0	1170	52900	166000	.50	155	.21
3	0	0	0	382	50300	56400	6.0	3970	957
4	0	0	0	310	52500	44800	8.2	41600	1040
5	0	0	0	1110	72100	257000	1.2	10000	32
6	0	0	0	808	56700	130000	63	32900	9490
7	0	0	0	452	53300	68800	16	11000	1180
8	0	0	0	104	38600	11000	2.7	6500	47
9	0	0	0	35	30000	2840	.50	3000	4.0
10	55	9600	1530	22	25000	1480	.40	153	.16
11	45	6600	802	12	19500	632	.20	138	.07
12	2.9	4000	31	7.4	7500	150	0	0	0
13	1.7	2200	10	5.9	2500	40	71	15800	11400
14	16	4280	1030	3.9	691	7.3	28	19000	1440
15	15	30800	1710	2.4	400	2.6	10	10000	270
16	193	92600	48900	26	37200	4850	2.0	6000	32
17	83	83100	20300	11	18000	535	.50	2000	2.7
18	6.9	41500	773	6.4	3500	60	0	0	0
19	528	49300	122000	6.4	1760	30	21	18800	1490
20	958	80200	41800	63	85900	18000	2.9	7000	55
21	2020	71600	447000	36	77000	7480	83	59600	19100
22	130	43300	16300	14	80800	3050	200	62300	46400
23	59	38400	6120	4.9	22400	296	3.9	72000	126
24	28	20100	1520	3.9	3000	32	2.9	2000	16
25	16	7000	340	3.4	402	3.7	14	21400	2050
26	26	22600	1930	2.9	226	1.8	2.9	13000	102
27	127	38700	35800	2.4	981	6.4	10	34000	918
28	340	52300	75600	2.2	123	.73	6.9	19000	354
29	72	7500	1460	2.2	91	.54	2.9	4000	31
30	170	83800	44000	1.5	94	.38	2.4	1000	6.5
31	742	69200	161000	1.2	144	.47	--	--	--
TOTAL	5696.5	--	1029956	4861.0	--	806398.92	563.70	--	96543.98

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 11691.50
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 1933344.22

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ANALYSES MADE IN DISTILLED WATER)

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
JAN.								
10...	1615	39	18.0	2310	243	56	74	96
JULY								
14...	2050	31	26.0	14200	1190	49	71	98
30...	0715	322	28.0	112000	97400	51	64	86
AUG.								
03...	1245	464	33.0	61500	77000	48	68	80
16...	1045	98	30.0	131000	31800	49	61	98

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
JAN.							
10...	99	--	99	--	100	--	--
JULY							
14...	100	--	--	--	--	--	--
30...	--	97	--	98	--	99	100
AUG.							
03...	--	96	--	99	--	100	--
16...	--	98	--	99	--	100	--

09474000 GILA RIVER AT KELVIN, ARIZ.

LOCATION.--Lat 33°06'11", long 110°58'26", in NE¼NW¼ sec.12, T.4 S., R.13 E., Pinal County, at Florence-Kelvin road bridge at Kelvin, 200 ft (60 m) upstream from Mineral Creek, 700 ft (200 m) upstream from gaging station, 18 mi (29 km) downstream from San Pedro River, 19 mi (31 km) upstream from Ashurst-Hayden Dam, and 49 mi (79 km) downstream from Coolidge Dam.

DRAINAGE AREA.--18,011 mi^2 (46,648 km^2) at gaging station, of which 5,125 mi^2 (13,274 km^2) is below Coolidge Dam.

PERIOD OF RECORD.--Chemical analyses: December 1950 to current year.
Water temperatures: December 1950 to current year.
Sediment records: January 1958 to current year.

EXTREMES.--Current year:
Dissolved solids: Maximum, 1,520 mg/l Nov. 1-26; minimum, 500 mg/l Oct. 1-27.
Hardness: Maximum, 710 mg/l Nov. 1-26; minimum, 200 mg/l May 1-31.
Specific conductance: Maximum daily, 2,560 micromhos Nov. 12; minimum daily, 780 micromhos Aug. 7.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	MEAN DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.												
01-27	282	28	20	58	15	91	4.4	184	0	100	110	.9
28-31	71	28	20	180	38	180	8.7	228	0	450	230	1.1
NOV.												
01-26	21	[illegible]	30	200	50	230	9.8	284	0	570	290	1.0
27-30	108	28	30	59	16	98	4.9	186	0	110	120	.9
DEC.												
01-31	287	28	20	64	17	100	4.8	190	0	110	140	.8
JAN.												
01-31	189	30	20	72	18	130	5.6	214	0	130	180	1.0
FEB.												
01-28	401	25	20	61	15	110	4.8	180	0	110	150	.9
MAR.												
01-31	740	24	20	59	15	100	4.7	175	0	100	140	.8
APR.												
01-30	863	24	30	60	15	110	4.7	178	0	100	150	.8
MAY												
01-31	848	23	20	56	14	100	4.5	168	0	100	140	.8
JUNE												
01-30	834	24	30	58	15	100	4.6	172	0	100	140	.9
JULY												
01-31	452	23	30	60	14	100	4.8	177	0	100	140	.9
AUG.												
01-31	500	25	40	60	15	110	4.8	184	0	110	150	.8
SEP.												
01-30	608	25	30	62	16	120	5.0	184	0	120	150	.8
WTD. AVG.	--	25	28	60	15	106	4.7	177	0	107	144	.8
TIME WTD. AVG.	543	26	26	72	18	116	5.2	189	0	144	156	.9
TOT. LOAD (TONS)	--	13100	15	32300	8110	56600	2540	94400	0	57200	77300	452

09474000 GILA RIVER AT KELVIN, ARIZ.--Continued

EXTREMES.--Current year:--Continued
Water temperatures: Maximum, 25.0°C Aug. 8; minimum, 7.0°C Dec. 23-26.
Sediment concentrations: Maximum daily, 60,100 mg/l Aug. 6; minimum daily, 6 mg/l Nov. 10.
Sediment discharge: Maximum daily, 314,000 tons (285,000 tonnes) July 21; minimum daily, 0.32 ton (0.29 tonne) Nov. 10.

Period of record:
Dissolved solids: Maximum, 4,330 mg/l Jan. 3, 1966; minimum, 294 mg/l Sept. 24, 1954, Feb. 12, 1963.
Hardness: Maximum, 2,610 mg/l Jan. 3, 1966; minimum, 152 mg/l Sept. 1-30, 1957.
Specific conductance: Maximum daily, 5,120 micromhos May 22, 1961; minimum daily, 406 micromhos Oct. 18, 1971.
Water temperatures: Maximum, 36.5°C July 25, Aug. 20, 1953; minimum, 3.5°C Jan. 13, 1962.
Sediment concentrations: Maximum daily, 153,000 mg/l July 30, 1961; minimum daily, 0 mg/l July 3, 1971.
Sediment discharge: Maximum daily, 740,000 tons (671,000 tonnes) Dec. 23, 1965; minimum daily, 0 ton (0 tonne) on July 2-5, 11, 1971.

REMARKS.--No appreciable inflow from Mineral Creek between sampling point and gaging station except during periods of heavy local rains. Sediment discharge figures include sediment load from Mineral Creek.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO-PHOS-PHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.												
01-27	.20	.22	110	503	500	.68	356	210	56	2.8	842	8.3
28-31	.70	.17	100	1220	1210	1.66	234	580	370	3.3	1800	8.1
NOV.												
01-26	.29	.13	220	1510	1520	2.05	85.6	710	470	3.6	2290	8.2
27-30	.48	.21	110	531	531	.72	241	210	61	2.9	894	8.1
DEC.												
01-31	.10	.08	110	562	559	.76	435	230	74	2.9	945	8.2
JAN.												
01-31	.15	.08	130	684	673	.93	349	250	78	3.6	1150	7.9
FEB.												
01-28	.13	.05	130	583	566	.79	631	210	66	3.3	971	8.0
MAR.												
01-31	.12	.05	120	573	531	.78	1150	210	66	3.0	940	7.9
APR.												
01-30	.12	.06	110	575	553	.78	1030	210	66	3.3	951	7.9
MAY												
01-31	.11	.05	100	538	522	.73	941	200	60	3.1	904	7.8
JUNE												
01-30	.12	.06	110	571	528	.78	1290	210	66	3.0	927	8.0
JULY												
01-31	.13	.04	120	566	531	.77	1460	210	62	3.0	946	--
AUG.												
01-31	.14	.06	130	570	560	.78	1390	210	73	3.3	947	--
SEP.												
01-30	.13	.04	130	595	547	.81	477	220	70	3.5	991	--
WTD. AVG.	.13	.06	119	574	557	.78	--	214	68	3.2	951	8.0
TIME WTD. AVG.	.13	.04	120	648	637	.88	--	255	99	3.2	1060	8.0
TOT. LOAD (TONS)	84	32	84	307000	298000	--	--	--	--	--	--	--

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	OIL AND GREASE (MG/L)
DEC.			
01...	1500	215	E890
02...	1700	220	19

09474000 GILA RIVER AT KELVIN, ARIZ.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	784	2100	881	1020	1120	920	955	910	920	930	---	920
2	792	1910	888	---	---	920	945	905	925	930	---	920
3	828	1920	902	1010	---	915	950	900	915	930	---	---
4	810	1970	923	1020	---	915	950	900	920	925	---	970
5	828	2020	923	1030	---	910	950	900	920	930	---	920
6	822	2010	916	1060	---	915	945	895	925	930	---	920
7	822	2090	938	1020	990	920	950	900	920	935	780	960
8	835	2050	954	1010	995	930	955	900	925	935	965	935
9	835	2120	962	1110	960	935	955	910	920	935	990	925
10	832	2110	987	1140	960	945	960	---	920	965	990	930
11	828	2230	970	---	950	945	955	905	---	950	975	950
12	828	2560	962	1310	960	940	950	900	920	910	965	945
13	832	2510	966	1310	955	940	945	890	915	910	960	945
14	826	---	966	1250	965	930	945	895	925	915	955	975
15	826	2310	958	1300	950	935	---	895	920	920	940	970
16	832	2310	905	1300	950	935	940	895	920	1000	960	970
17	828	2320	891	1310	955	940	930	900	925	1010	945	975
18	822	---	898	1100	940	930	935	905	925	920	950	975
19	---	2230	891	1070	950	930	935	905	920	945	950	980
20	---	2380	893	1080	940	---	930	900	920	960	980	985
21	822	2380	902	1090	950	950	940	900	920	845	930	1030
22	820	2260	914	1120	960	950	940	895	920	970	925	805
23	824	2260	918	1120	960	945	940	905	925	980	935	1060
24	828	2200	914	1130	950	950	930	900	925	965	920	1140
25	822	---	892	1100	955	940	930	910	920	---	---	1080
26	828	2200	895	1090	950	940	935	900	920	---	940	1040
27	1180	876	881	1090	940	945	930	905	---	---	920	1040
28	1460	868	884	1100	940	940	935	905	---	---	920	1080
29	1770	883	884	1110	---	---	930	---	925	---	935	1080
30	1980	854	891	1130	---	950	925	900	930	---	925	1080
31	1970	---	1010	1110	---	955	---	900	---	---	910	---
MEAN	969	2000	921	1130	963	935	942	901	922	---	---	983

YEAR MAX 2560 MIN 780 MEAN 1040

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	17.0	15.0	9.0	12.0	12.0	13.0	16.0	20.0	21.0	---	22.0
2	19.0	17.0	12.0	---	---	11.0	13.0	16.0	20.0	21.0	---	22.0
3	19.0	17.0	10.0	8.0	---	12.0	13.0	16.0	20.0	21.0	---	---
4	19.0	17.0	10.0	8.0	---	12.0	13.0	16.0	20.0	21.0	---	21.0
5	20.0	17.0	12.0	10.0	---	11.0	13.0	16.0	20.0	21.0	---	22.0
6	20.0	17.0	12.0	10.0	---	11.0	13.0	16.0	18.0	19.0	---	22.0
7	20.0	17.0	12.0	10.0	9.0	13.0	14.0	16.0	18.0	19.0	22.0	22.0
8	19.0	17.0	11.0	12.0	9.0	11.0	14.0	16.0	18.0	19.0	25.0	22.0
9	19.0	17.0	11.0	10.0	10.0	10.0	15.0	16.0	20.0	19.0	23.0	23.0
10	19.0	17.0	12.0	12.0	11.0	11.0	16.0	---	19.0	19.0	22.0	22.0
11	19.0	17.0	12.0	---	11.0	12.0	16.0	17.0	---	19.0	22.0	22.0
12	19.0	18.0	12.0	12.0	10.0	12.0	14.0	16.0	20.0	19.0	22.0	23.0
13	19.0	19.0	12.0	12.0	12.0	12.0	15.0	16.0	21.0	19.0	22.0	20.0
14	19.0	---	10.0	12.0	12.0	13.0	15.0	16.0	20.0	19.0	22.0	21.0
15	20.0	18.0	11.0	12.0	12.0	14.0	---	17.0	20.0	20.0	23.0	21.0
16	20.0	18.0	12.0	13.0	12.0	13.0	16.0	17.0	20.0	20.0	23.0	22.0
17	20.0	18.0	12.0	11.0	12.0	13.0	16.0	17.0	20.0	20.0	22.0	22.0
18	19.0	---	10.0	11.0	11.0	13.0	16.0	17.0	20.0	20.0	22.0	22.0
19	---	15.0	10.0	12.0	11.0	13.0	16.0	16.0	20.0	21.0	22.0	21.0
20	---	15.0	10.0	12.0	11.0	---	16.0	16.0	20.0	21.0	21.0	21.0
21	18.0	13.0	8.0	13.0	10.0	13.0	16.0	16.0	20.0	21.0	21.0	22.0
22	18.0	13.0	7.0	12.0	10.0	13.0	16.0	16.0	21.0	22.0	20.0	20.0
23	18.0	13.0	7.0	10.0	10.0	13.0	16.0	16.0	21.0	22.0	20.0	23.0
24	18.0	14.0	7.0	10.0	10.0	14.0	16.0	17.0	21.0	22.0	21.0	24.0
25	18.0	---	7.0	11.0	11.0	13.0	16.0	18.0	21.0	---	---	23.0
26	18.0	10.0	7.0	10.0	11.0	13.0	16.0	19.0	21.0	---	21.0	23.0
27	18.0	10.0	10.0	12.0	13.0	13.0	15.0	20.0	---	---	21.0	23.0
28	18.0	11.0	9.0	10.0	12.0	13.0	16.0	20.0	---	---	21.0	23.0
29	17.0	12.0	10.0	10.0	---	---	16.0	---	21.0	---	21.0	23.0
30	17.0	14.0	10.0	11.0	---	14.0	16.0	20.0	21.0	---	21.0	23.0
31	17.0	---	10.0	10.0	---	14.0	---	20.0	---	---	21.0	---
MEAN	18.5	15.5	10.5	11.0	11.0	12.5	15.0	17.0	20.0	---	---	22.0

YEAR MAX 25.0 MIN 7.0 MEAN 16.0

09474000 GILA RIVER AT KELVIN, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	371	138	138	43	18	2.1	214	86	50
2	351	124	118	36	16	1.6	221	186	111
3	312	166	140	32	7	.60	223	116	70
4	303	213	174	30	14	1.1	211	165	94
5	294	171	136	28	9	.68	241	213	139
6	282	154	117	26	19	1.3	241	304	198
7	265	116	83	24	12	.78	216	145	85
8	254	132	91	23	9	.56	209	97	55
9	244	124	82	22	9	.53	206	117	65
10	244	183	121	20	6	.32	216	118	69
11	241	143	93	18	11	.53	214	64	37
12	241	97	63	23	7	.43	214	82	47
13	241	139	90	19	8	.41	214	98	57
14	235	50	32	16	35	1.5	211	233	133
15	241	84	55	15	20	.81	209	93	52
16	249	64	43	15	20	.81	271	461	337
17	241	82	53	14	19	.72	318	169	145
18	241	73	48	15	10	.40	334	194	175
19	241	59	38	20	8	.43	375	296	300
20	244	183	121	18	36	1.7	396	150	160
21	249	132	89	15	27	1.1	358	138	133
22	245	143	96	15	17	.69	318	140	120
23	249	438	294	15	23	.93	318	124	106
24	251	142	96	16	13	.56	315	36	31
25	251	79	54	15	13	.53	354	302	289
26	254	187	128	18	22	1.1	407	142	156
27	246	35	23	125	255	86	403	153	166
28	111	9	2.7	162	86	38	403	231	251
29	67	15	2.7	186	289	145	403	130	141
30	57	16	2.5	197	286	152	403	162	176
31	50	14	1.9	--	--	--	275	36	27
TOTAL	7372	--	2625.8	1221	--	443.22	8911	--	3975

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	216	37	22	212	18	10	700	513	970
2	210	50	28	210	17	9.6	705	451	858
3	204	82	45	208	16	9.0	705	243	463
4	202	82	45	206	17	9.5	745	303	609
5	210	79	45	275	83	62	750	342	693
6	210	88	50	338	160	146	750	102	207
7	202	92	50	356	58	56	755	250	510
8	239	58	37	365	57	56	755	383	781
9	422	49	56	387	86	98	760	289	593
10	338	785	716	418	183	207	750	243	492
11	144	196	76	422	230	262	745	223	449
12	113	131	40	426	206	237	750	240	486
13	104	54	15	426	55	63	725	274	536
14	101	58	16	422	148	169	710	223	427
15	96	28	7.3	418	143	161	715	280	541
16	94	37	9.4	443	85	102	720	206	400
17	96	45	12	474	77	99	755	269	548
18	135	95	35	478	497	641	770	216	449
19	164	45	20	482	144	187	780	273	575
20	170	39	18	466	155	195	816	250	551
21	180	39	19	440	200	238	765	362	748
22	182	31	15	436	202	238	765	230	476
23	188	68	35	429	49	57	765	259	535
24	196	29	15	443	126	151	755	236	481
25	198	28	15	454	354	434	755	271	552
26	200	28	15	490	278	368	725	215	421
27	208	24	13	510	232	319	710	243	466
28	208	24	13	598	450	727	710	168	322
29	210	23	13	--	--	--	715	264	510
30	214	26	15	--	--	--	710	274	525
31	212	19	11	--	--	--	700	177	335
TOTAL	5866	--	1521.7	11232	--	5303.1	22936	--	16509

09474000 GILA RIVER AT KELVIN, ARIZ.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	705	130	247	710	81	155	795	311	668
2	705	150	286	720	71	138	785	125	265
3	685	139	257	740	96	192	780	239	503
4	670	151	273	760	68	140	775	180	377
5	650	136	239	760	204	419	780	179	377
6	645	92	160	760	141	289	816	262	577
7	615	232	385	760	147	302	822	208	462
8	602	99	161	760	385	790	810	283	619
9	606	129	211	745	221	445	810	281	615
10	606	106	173	740	154	308	810	258	564
11	635	70	120	715	222	429	810	260	569
12	655	251	444	710	147	282	805	276	600
13	650	149	261	710	236	452	800	295	637
14	650	152	267	700	207	391	800	303	654
15	685	172	318	665	153	275	800	282	609
16	700	121	229	635	137	235	795	370	794
17	780	103	195	606	144	236	810	196	429
18	590	52	97	578	158	247	805	280	609
19	665	43	77	562	157	238	810	238	521
20	655	48	85	498	81	109	852	287	660
21	650	114	200	504	135	184	870	327	768
22	645	436	759	494	257	343	870	315	740
23	645	73	127	474	113	145	870	323	759
24	650	125	219	478	286	369	882	293	698
25	670	65	118	522	169	238	882	277	660
26	665	80	144	570	254	391	894	296	714
27	685	105	194	562	110	167	894	205	495
28	710	232	445	578	102	159	918	395	979
29	700	86	163	615	112	186	930	335	841
30	700	129	244	675	234	426	942	541	1390
31	--	--	--	770	154	320	--	--	--
TOTAL	19894	--	7098	20076	--	9000	25022	--	19153

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	966	323	842	1140	18100	55700	770	667	1390
2	972	394	1030	2790	17000	132000	770	581	1210
3	972	372	976	1280	23200	82800	775	550	1150
4	972	298	782	1360	20900	84400	775	4800	10000
5	972	356	934	1180	30000	127000	775	3100	6490
6	972	356	934	1890	60100	309000	800	3500	7560
7	972	278	730	927	43900	114000	986	3900	10400
8	972	304	798	432	20600	24000	795	1400	3010
9	972	368	966	443	6800	8130	800	900	1940
10	1000	2350	6340	552	4100	6110	834	791	1780
11	1000	3550	9580	514	3300	4580	834	740	1670
12	942	1300	3310	562	2500	3790	840	762	1730
13	912	470	1160	620	1900	3180	879	3630	11400
14	795	460	987	660	1700	3030	758	17700	36900
15	822	550	1220	665	2000	3590	602	3300	5360
16	1060	11000	32900	775	1900	3980	586	1100	1740
17	972	12600	33100	775	2200	4600	554	742	1110
18	912	3600	8860	785	1600	3390	498	908	1220
19	1330	17300	85900	785	6700	14200	530	1900	2720
20	1170	10400	36400	912	13500	33200	482	2000	2600
21	2060	54600	314000	906	8300	20300	515	6470	10100
22	720	23500	45700	870	3100	7280	675	49900	102000
23	538	11100	16100	852	1500	3450	326	4500	3960
24	590	5800	9240	834	1200	2700	299	1000	807
25	670	2100	3800	822	900	2000	329	3400	3020
26	670	1300	2350	816	736	1620	308	4300	3580
27	720	4000	7780	770	802	1670	317	2400	2050
28	1070	24700	73700	770	1040	2160	278	2600	1950
29	828	7450	16700	740	617	1230	262	1500	1060
30	827	17400	40800	740	789	1580	288	1200	933
31	1150	23200	80700	770	702	1460	--	--	--
TOTAL	29500	--	838619	27937	--	1066130	18240	--	240840

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 198207
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 2211217.82

09474000 GILA RIVER AT KELVIN, ARIZ.--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ANALYSES MADE IN DISTILLED WATER)

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
JAN.								
10...	1700	706	12.0	765	1500	60	77	94
JULY								
19...	1800	2400	21.0	53300	345000	42	56	86
SEP.								
22...	1400	985	22.0	66300	176000	42	53	77

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
JAN.							
10...	95	--	96	--	97	--	100
JULY							
19...	100	--	--	--	--	--	--
SEP.							
22...	--	98	--	99	--	100	--

09480500 SANTA CRUZ RIVER NEAR NOGALES, ARIZ.

LOCATION.--Lat 31°21'40", long 110°51'03", in NW¼ sec.18, T.24 S., R.15 E. (unsurveyed), Santa Cruz County, in Spanish land grant of Maria Santisima del Carmen, 0.8 mi (1.3 km) downstream from international boundary and 5.5 mi (8.8 km) east of Nogales.

DRAINAGE AREA.--533 mi^2 (1,380 km^2), of which 348 mi^2 (901 km^2) is in Mexico.

PERIOD OF RECORD.--Sediment records: October 1970 to current year.

REMARKS.--No flow many days each year.

Monthly and annual summary of suspended-sediment discharge, water years October 1970 to September 1974

Month	Discharge (cfs)	Suspended-sediment (tons)	Month	Discharge (cfs)	Suspended-sediment (tons)
October 1970.....	190.6	10.42	October 1971.....	1,319.0	6,290.60
November.....	159.5	2.40	November.....	614.0	223.30
December.....	164.4	4.03	December.....	614.0	228.30
January 1971.....	136.9	2.09	January 1972.....	393.0	74.60
February.....	104.4	2.00	February.....	249.0	29.90
March.....	104.1	1.42	March.....	157.0	7.00
April.....	44.8	.67	April.....	35.9	1.70
May.....	6.5	.04	May.....	18.0	.37
June.....	0	0	June.....	2.0	0
July.....	1,007.5	28,039.90	July.....	48.6	57.30
August.....	5,587.4	172,325.62	August.....	215.9	650.45
September.....	1,099.7	5,188.82	September.....	208.8	956.45
Total for year.	8,605.8	205,577.41	Total for year.	3,935.2	8,519.97

Month	Discharge (cfs)	Suspended-sediment (tons)	Month	Discharge (cfs)	Suspended-sediment (tons)
October 1972.....	145.4	442.24	October 1973.....	0	0
November.	122.3	21.98	November.....	0	0
December.....	111.7	5.17	December.....	0	0
January 1973.....	172.6	10.09	January 1974.....	0	0
February.....	2,388.8	138,953.16	February.....	0	0
March.....	6,279.0	202,758.00	March.....	0	0
April.....	659.4	406.41	April.....	0	0
May.....	90.6	3.34	May.....	0	0
June.....	2.4	0	June.....	0	0
July.....	57.0	125.60	July.....	3,090.9	533,350.50
August.....	80.4	1,750.22	August.....	4,827.6	3,526,412.34
September.....	0	0	September.....	299.1	5,154.93
Total for year.	10,109.60	344,476.21	Total for year.	8,217.6	4,084,917.77

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, ARIZ.
(National stream-quality accounting network station)

LOCATION.--Lat 33°33'59", long 111°32'08", in sec.33, T.3 N., R.8 E. (unsurveyed), Maricopa County, at Stewart Mountain Dam, 3.5 mi (5.6 km) upstream from gaging station, and 9.5 mi (15.3 km) upstream from Verde River.

DRAINAGE AREA.--6,232 mi^2 (16,140 km^2), at gaging station, of which 21 mi^2 (54 km^2) is downstream from Stewart Mountain Dam.

PERIOD OF RECORD.--Chemical analyses: December 1950 to current year.
Water temperatures: December 1950 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 835 micromhos on several days during September; minimum daily, 615 micromhos on several days during April.
Water temperatures: Maximum, 21.0°C on several days during July, August, and September; minimum, 12.0°C on several days during March and April.

Period of record:
Specific conductance: Maximum daily, 2,490 micromhos Aug. 20, 1951; minimum daily, 615 micromhos on several days during April 1974.
Water temperatures: Maximum, 29.0°C Aug. 24, 26, 27, 1951, Sept. 11, 12, 1969; minimum, 9.5°C Feb. 14, 1951.

REMARKS.--No inflow between sampling point and gaging station except during periods of heavy local rains. No flow at sampling point Nov. 4 to Feb. 28.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT. 15...	0730	1140	15	20	42	10	70	3.0	133
MAR. 14...	0830	900	16	--	42	11	69	3.5	138
APR. 24...	1045	265	16	50	41	10	68	3.2	138
MAY 29...	1030	2080	16	--	43	11	79	3.3	140
JUNE 26...	0900	1800	16	--	45	11	83	3.2	143
JULY 16...	1100	1550	16	--	42	12	88	3.5	144
AUG. 28...	0730	1640	16	20	45	12	93	3.9	150
SEP. 25...	1300	840	16	--	47	12	94	4.0	152

DATE	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 15...	0	41	100	.2	.04	.03	70	349	347
MAR. 14...	0	45	110	.4	.01	.02	60	369	365
APR. 24...	0	48	99	.4	.16	.02	60	366	355
MAY 29...	0	49	120	.4	.00	.02	70	416	391
JUNE 26...	--	47	130	.3	.02	.02	90	435	406
JULY 16...	0	48	140	.2	.04	.04	80	426	421
AUG. 28...	--	46	150	.2	.00	.02	70	446	440
SEP. 25...	--	48	150	.2	.03	.02	210	444	446

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, ARIZ.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.								
15...	.47	150	37	2.5	638	7.9	18.0	--
MAR.								
14...	.50	150	37	2.5	659	7.8	11.0	3
APR.								
24...	.50	140	30	2.5	638	8.1	14.0	1
MAY								
29...	.57	150	38	2.8	709	7.9	17.0	2
JUNE								
26...	.59	160	40	2.9	760	7.4	9.0	1
JULY								
16...	.58	150	36	3.1	805	7.8	20.0	3
AUG.								
28...	.61	160	39	3.2	880	7.8	22.0	3
SEP.								
25...	.60	170	42	3.2	850	7.6	21.0	4

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
MAR.								
14...	0830	.00	.05	.02	.08	.10	.44	.05
APR.								
24...	1045	.16	.01	.17	.33	.50	2.2	.09
MAY								
29...	1030	.00	.03	.03	.38	.41	1.8	.05
JUNE								
26...	0900	--	--	.02	.30	.32	1.4	.04
JULY								
16...	1100	--	--	.04	.14	.18	.80	.09
AUG.								
28...	0730	--	--	.03	.23	.26	1.2	.05
SEP.								
25...	1300	--	--	.09	.33	.42	1.9	.08

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, ARIZ.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)
MAY				
29...	1030	320	14	30
JULY				
16...	1100	--	16	17
AUG.				
28...	0730	--	<1	62
SEP.				
25...	1300	--	41	640

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
APR.												
24...	1045	4	5	0	10	0	0	1	<50	6	20	50
AUG.												
28...	0730	4	4	0	<10	0	0	0	<50	1	<10	20

DATE	TOTAL IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
APR.												
24...	230	3	<100	0	0	.0	.0	1	2	40	100	4.1
AUG.												
28...	330	0	<100	30	60	.0	.1	1	1	7	20	4.1

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, ARIZ.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	640	660	---	---	---	---	635	630	720	760	790	815
2	640	---	---	---	---	670	630	630	725	760	790	815
3	640	640	---	---	---	680	635	635	725	760	790	815
4	650	---	---	---	---	675	625	635	730	760	790	815
5	650	---	---	---	---	680	635	635	730	765	785	825
6	650	---	---	---	---	680	625	640	730	765	790	820
7	650	---	---	---	---	680	620	640	735	765	790	820
8	645	---	---	---	---	670	620	645	740	765	790	825
9	640	---	---	---	---	---	620	645	735	765	795	825
10	650	---	---	---	---	670	620	645	735	765	790	825
11	645	---	---	---	---	670	615	650	735	770	790	825
12	645	---	---	---	---	670	620	655	740	770	790	825
13	645	---	---	---	---	670	620	650	740	770	790	820
14	655	---	---	---	---	665	615	650	740	770	790	825
15	650	---	---	---	---	660	620	650	750	770	790	835
16	645	---	---	---	---	655	615	650	750	775	790	825
17	655	---	---	---	---	655	615	650	755	775	790	830
18	645	---	---	---	---	655	615	660	750	775	795	835
19	650	---	---	---	---	655	615	665	750	775	790	825
20	650	---	---	---	---	655	615	665	750	785	790	830
21	645	---	---	---	---	655	615	665	750	785	800	830
22	640	---	---	---	---	655	615	665	775	785	795	830
23	640	---	---	---	---	650	620	670	755	780	795	825
24	655	---	---	---	---	650	620	675	765	780	795	825
25	660	---	---	---	---	650	620	685	770	775	800	835
26	640	---	---	---	---	645	625	685	765	785	795	835
27	650	---	---	---	---	645	620	690	775	770	795	835
28	660	---	---	---	---	645	620	695	775	785	795	835
29	640	---	---	---	---	640	630	700	760	785	795	830
30	650	---	---	---	---	650	625	705	760	775	800	830
31	675	---	---	---	---	645	---	705	---	785	800	---
MEAN	648	---	---	---	---	660	621	660	747	773	793	826

YEAR	MAX	835	MIN	615	MEAN	716

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, ARIZ.--Continued.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	18.0	---	---	---	---	12.0	15.0	16.0	18.0	20.0	21.0
2	18.0	---	---	---	---	16.0	13.0	15.0	16.0	18.0	20.0	21.0
3	18.0	18.0	---	---	---	16.0	13.0	15.0	16.0	18.0	20.0	21.0
4	18.0	---	---	---	---	15.0	13.0	15.0	16.0	18.0	19.0	21.0
5	18.0	---	---	---	---	16.0	13.0	15.0	16.0	19.0	20.0	21.0
6	18.0	---	---	---	---	16.0	14.0	15.0	16.0	18.0	20.0	21.0
7	18.0	---	---	---	---	16.0	14.0	15.0	16.0	18.0	20.0	21.0
8	18.0	---	---	---	---	15.0	14.0	15.0	16.0	18.0	20.0	21.0
9	18.0	---	---	---	---	---	15.0	15.0	17.0	18.0	20.0	21.0
10	18.0	---	---	---	---	12.0	14.0	15.0	17.0	18.0	20.0	21.0
11	18.0	---	---	---	---	12.0	15.0	15.0	17.0	18.0	20.0	21.0
12	18.0	---	---	---	---	12.0	15.0	15.0	18.0	19.0	20.0	21.0
13	18.0	---	---	---	---	12.0	14.0	15.0	18.0	20.0	20.0	21.0
14	18.0	---	---	---	---	12.0	14.0	15.0	18.0	20.0	20.0	20.0
15	18.0	---	---	---	---	12.0	14.0	15.0	16.0	20.0	20.0	20.0
16	18.0	---	---	---	---	13.0	14.0	15.0	17.0	20.0	20.0	20.0
17	18.0	---	---	---	---	13.0	14.0	15.0	17.0	20.0	20.0	20.0
18	18.0	---	---	---	---	13.0	14.0	15.0	17.0	20.0	20.0	20.0
19	18.0	---	---	---	---	13.0	14.0	15.0	17.0	20.0	20.0	20.0
20	18.0	---	---	---	---	13.0	14.0	15.0	18.0	20.0	20.0	21.0
21	18.0	---	---	---	---	13.0	14.0	15.0	18.0	20.0	20.0	20.0
22	18.0	---	---	---	---	13.0	15.0	16.0	18.0	19.0	20.0	20.0
23	18.0	---	---	---	---	12.0	15.0	16.0	18.0	19.0	20.0	20.0
24	18.0	---	---	---	---	12.0	15.0	16.0	18.0	19.0	20.0	20.0
25	17.0	---	---	---	---	12.0	15.0	16.0	17.0	20.0	20.0	20.0
26	18.0	---	---	---	---	12.0	15.0	16.0	18.0	20.0	20.0	20.0
27	18.0	---	---	---	---	12.0	15.0	16.0	18.0	20.0	19.0	20.0
28	18.0	---	---	---	---	12.0	15.0	16.0	18.0	20.0	19.0	21.0
29	18.0	---	---	---	---	12.0	15.0	---	18.0	20.0	19.0	21.0
30	18.0	---	---	---	---	13.0	15.0	16.0	18.0	21.0	20.0	21.0
31	18.0	---	---	---	---	12.0	---	16.0	---	20.0	21.0	---
MEAN	18.0	---	---	---	---	13.0	14.0	15.5	17.0	19.0	20.0	20.5

YEAR MAX 21.0 MIN 12.0 MEAN 17.0

09508300 WET BOTTOM CREEK NEAR CHILDS, ARIZ.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°09'39", long 111°41'32", in sec.36, T.9½ N., R.6 E. (unsurveyed), Gila County in Tonto National Forest, at gaging station on right bank, 1.4 mi (2.2 km) upstream from mouth, and 13 mi (21 km) south of town of Childs.

DRAINAGE AREA.--36.4 mi^2 (94.3 km^2).

PERIOD OF RECORD.--Chemical analyses: August 1968 to current year.
Sediment records: August 1968 to current year.

REMARKS.--No flow Oct. 1-23, May 17 to Sept. 25.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
NOV.									
14...	1015	.13	33	10	45	12	29	1.4	231
DEC.									
14...	1015	.40	34	20	43	13	31	1.3	238
JAN.									
14...	1100	15	17	40	13	2.9	7.8	1.0	38
FEB.									
11...	1030	1.5	26	220	21	6.1	15	1.0	109
MAR.									
13...	1315	13	18	60	10	2.9	6.8	.8	42
APR.									
11...	1145	.60	30	30	27	7.4	16	1.2	134
MAY									
10...	1230	.09	31	50	38	9.9	20	1.3	189

DATE	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV.									
14...	4	8.4	16	1.8	.04	.07	30	248	265
DEC.									
14...	0	8.5	15	2.2	.08	.04	20	251	265
JAN.									
14...	0	9.8	6.3	1.1	.70	.02	40	90	81
FEB.									
11...	--	11	6.2	1.3	.06	.02	20	146	142
MAR.									
13...	0	9.7	3.5	.7	.03	.01	20	79	73
APR.									
11...	2	9.7	7.0	1.4	.13	.02	30	156	168
MAY									
10...	0	8.6	10	1.5	.05	.02	20	197	214

09508300 WET BOTTOM CREEK NEAR CHILDS, ARIZ.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)
NOV.								
14...	.34	160	0	1.0	415	8.4	14.0	--
DEC.								
14...	.34	160	0	1.1	424	8.2	11.0	--
JAN.								
14...	.12	44	13	.5	112	7.3	7.0	--
FEB.								
11...	.20	78	0	.7	221	7.4	9.0	8.0
MAR.								
13...	.11	37	2	.5	109	7.4	16.0	--
APR.								
11...	.21	98	0	.7	247	8.4	16.0	--
MAY								
10...	.27	140	0	.7	335	7.8	26.0	--

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	ALDRIN (UG/L)	CHLOR-DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)
DEC.											
14...	1015	.40	.00	.0	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	DI-AZINON (UG/L)	MALA-THION (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	PCB (UG/L)	TEMPER-ATURE (DEG C)
DEC.										
14...	.00	.00	.00	.00	.00	.00	.00	.00	.0	11.0

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT IN BOTTOM DE-POSITS (UG/KG)
FEB.							
11...	1030	1.5	.0	0	.0	.0	.0

DATE	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE IN BOT-TOM DE-POSITS (UG/KG)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	PCB IN BOTTOM DE-POSITS (UG/KG)
FEB.						
11...	.0	.0	.0	.0	.0	0

09508300 WET BOTTOM CREEK NEAR CHILDS, ARIZ.--Continued

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED NATURAL URANIUM (U) (UG/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
NOV.											
14...	1030	19	<.4	4.4	.4	3.6	.4	.04	3.2	270	<1

PERIODIC DAILY SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NOV.					
14...	1020	.13	14.0	1	.00
JAN.					
14...	1030	15	7.0	7	.28
FEB.					
11...	1030	1.5	9.0	3	.01
MAR.					
13...	1315	13	16.0	7	.25
APR.					
11...	1145	.60	16.0	0	.00
MAY					
10...	1230	.09	26.0	7	.00

09510000 VERDE RIVER BELOW BARTLETT DAM, ARIZ.
(National stream-quality accounting network station)

LOCATION.--Lat. 33°49'03", long 111°38'08", in SE¼ sec.33, T.6 N., R.7 E. (unsurveyed), Maricopa County, at gaging station in Tonto National Forest, on right bank 1,300 ft (400 m) downstream from Bartlett Dam, 5.9 mi (9.5 km) upstream from Camp Creek, and 18 mi (29 km) east of town of Cave Creek.

DRAINAGE AREA.--6,185 mi² (16,019 km²).

PERIOD OF RECORD.--Chemical analyses: December 1950 to current year.
Water temperatures: December 1950 to current year.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 760 micromhos Feb. 1; minimum daily, 325 micromhos Oct. 2.
Water temperatures: Maximum, 22.0°C on several days during August and September; minimum, 9.0°C on many days during January, February, March and April.

Period of record:
Specific conductance: Maximum daily, 958 micromhos Nov. 10, 1956; minimum daily, 195 micromhos May 13, 14, 1973.
Water temperatures: Maximum, 32.0°C July 18, Aug. 14, 1951; minimum, 5.0°C Jan. 30, 1952.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT.									
15...	0800	42	18	10	39	21	22	2.7	202
NOV.									
15...	0800	549	17	0	41	23	24	2.6	207
DEC.									
15...	0800	1160	17	10	41	24	25	2.6	228
JAN.									
15...	0800	79	17	40	45	27	27	2.8	249
FEB.									
15...	0800	1340	16	20	42	24	25	2.8	232
MAR.									
13...	0900	66	18	--	47	26	27	2.8	252
APR.									
24...	0830	210	17	50	46	27	29	2.7	259
MAY									
29...	0830	385	17	--	47	27	27	2.7	262
JUNE									
25...	0845	750	17	--	49	29	30	2.5	269
JULY									
16...	0900	25	19	--	47	28	30	2.9	279
AUG.									
28...	1000	320	18	20	45	32	36	3.3	279
SEP.									
25...	0945	49	20	--	48	34	36	3.4	295

DATE	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.									
15...	4	42	14	.3	.55	.09	110	254	265
NOV.									
15...	6	42	17	.4	.20	.02	110	266	276
DEC.									
15...	4	48	16	.5	.11	.02	140	291	291
JAN.									
15...	0	49	17	.3	.12	.03	140	327	309
FEB.									
15...	0	45	16	.2	.18	.03	140	288	286
MAR.									
13...	0	51	16	.6	.02	.03	140	310	315
APR.									
24...	0	58	16	.5	.14	.01	140	319	325
MAY									
29...	0	55	17	.5	.11	.03	140	332	323
JUNE									
25...	0	54	19	.3	.00	.01	170	324	334
JULY									
16...	0	55	20	.3	.13	.09	150	329	340
AUG.									
28...	0	61	22	.3	.08	.03	160	348	356
SEP.									
25...	0	65	24	.4	.08	.09	240	364	377

09510000 VERDE RIVER BELOW BARTLETT DAM, ARIZ.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.								
15...	.35	180	11	.7	432	8.4	20.0	--
NOV.								
15...	.36	200	17	.7	459	8.5	18.0	--
DEC.								
15...	.40	200	8	.8	495	8.4	13.0	--
JAN.								
15...	.44	220	19	.8	530	8.5	9.0	--
FEB.								
15...	.39	200	13	.8	498	8.3	10.0	--
MAR.								
13...	.42	220	18	.8	532	8.1	10.0	20
APR.								
24...	.43	230	14	.8	532	8.3	11.0	7
MAY								
29...	.45	230	14	.8	548	8.2	12.0	4
JUNE								
25...	.44	240	21	.8	570	7.8	15.0	2
JULY								
16...	.45	230	4	.9	580	8.3	18.0	3
AUG.								
28...	.47	240	15	1.0	610	8.0	23.0	1
SEP.								
25...	.50	260	18	1.0	650	8.3	22.0	3

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
MAR.								
13...	0900	.02	.01	.03	.11	.14	.62	.07
APR.								
24...	0830	.14	.01	.15	.21	.36	1.6	.06
MAY								
29...	0830	.13	.00	.13	.34	.47	2.1	.03
JUNE								
25...	0845	--	--	.02	.21	.23	1.0	.03
JULY								
16...	0900	--	--	.23	.28	.51	2.3	.05
AUG.								
28...	1000	--	--	.07	.37	.44	1.9	.05
SEP.								
25...	0945	--	--	.15	.90	1.1	4.6	.14

09510000 VERDE RIVER BELOW BARTLETT DAM, ARIZ.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)
APR.				
24...	0830	--	--	6
MAY				
29...	0830	470	<1	12
JUNE				
25...	0845	--	<1	124
JULY				
16...	0900	--	5	2
AUG.				
28...	1000	--	40	48
SEP.				
25...	0945	--	23	55

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
APR.												
24...	0830	10	21	0	10	0	0	1	<50	5	10	50
AUG.												
28...	1000	16	15	0	<10	0	0	0	<50	0	<10	20

DATE	TOTAL IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
APR.												
24...	440	2	<100	50	50	.0	.0	3	0	30	200	2.3
AUG.												
28...	220	1	<100	130	120	.0	.0	1	1	0	20	2.7

09510000 VERDE RIVER BELOW BARTLETT DAM, ARIZ.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	440	490	540	760	510	525	525	500	565	565	615
2	325	440	490	535	500	510	530	445	520	475	590	625
3	330	445	490	535	490	500	525	525	525	570	545	630
4	330	440	490	545	500	505	525	525	445	555	585	630
5	330	450	490	565	510	505	530	525	540	575	585	630
6	330	445	495	555	505	510	520	475	540	545	585	620
7	335	435	520	565	500	520	530	525	540	560	585	615
8	335	430	495	570	500	525	525	525	535	580	595	630
9	340	440	495	560	500	530	525	520	495	570	595	630
10	340	460	500	560	500	530	530	525	515	550	595	630
11	375	460	490	565	500	530	525	505	520	570	600	630
12	370	455	490	560	495	540	525	520	480	570	600	625
13	370	450	490	575	495	540	520	470	530	565	600	635
14	430	450	490	560	500	525	525	520	540	560	600	635
15	445	455	490	550	500	530	535	520	435	550	600	625
16	465	440	495	550	505	530	530	525	545	565	600	625
17	465	440	495	540	500	530	510	480	465	575	600	630
18	465	440	490	545	500	530	525	525	475	570	560	630
19	465	450	490	540	500	530	530	525	545	580	585	635
20	470	455	490	540	500	525	525	530	550	585	605	635
21	470	450	490	545	500	535	525	530	510	580	610	635
22	470	460	490	520	500	535	530	525	540	560	615	635
23	475	460	500	505	505	535	525	520	480	585	615	635
24	480	470	500	520	520	535	525	495	525	580	610	635
25	480	475	490	520	520	530	530	535	545	580	610	635
26	460	475	490	520	520	540	530	525	550	580	610	635
27	465	480	480	520	520	540	525	530	560	585	605	620
28	470	480	480	520	525	535	530	525	560	585	605	635
29	460	480	480	520	---	530	525	525	510	585	610	635
30	460	485	505	520	---	535	520	530	560	555	610	635
31	455	---	520	520	---	530	---	530	---	580	610	---
MEAN	413	455	493	541	513	527	526	516	519	567	596	630

YEAR MAX 760 MIN 325 MEAN 525

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	18.0	14.0	10.0	9.0	10.0	10.0	12.0	12.0	17.0	20.0	---
2	20.0	18.0	14.0	10.0	9.0	10.0	10.0	11.0	12.0	17.0	20.0	---
3	20.0	18.0	13.0	10.0	10.0	10.0	10.0	12.0	13.0	17.0	20.0	---
4	19.0	18.0	13.0	10.0	10.0	10.0	9.0	12.0	13.0	17.0	20.0	---
5	20.0	18.0	13.0	10.0	10.0	10.0	9.0	12.0	13.0	17.0	20.0	---
6	19.0	18.0	13.0	10.0	10.0	10.0	9.0	12.0	13.0	17.0	20.0	22.0
7	19.0	18.0	13.0	10.0	10.0	10.0	10.0	12.0	13.0	17.0	20.0	21.0
8	19.0	18.0	13.0	10.0	10.0	10.0	10.0	12.0	13.0	17.0	19.0	21.0
9	19.0	18.0	13.0	10.0	10.0	10.0	10.0	12.0	13.0	17.0	19.0	21.0
10	19.0	18.0	13.0	9.0	10.0	9.0	10.0	12.0	13.0	17.0	18.0	20.0
11	19.0	18.0	13.0	9.0	10.0	9.0	10.0	12.0	13.0	16.0	18.0	21.0
12	19.0	18.0	13.0	9.0	10.0	10.0	10.0	12.0	13.0	16.0	18.0	21.0
13	19.0	18.0	13.0	9.0	10.0	10.0	10.0	13.0	13.0	17.0	18.0	21.0
14	19.0	18.0	13.0	9.0	10.0	10.0	10.0	14.0	13.0	17.0	20.0	22.0
15	20.0	18.0	13.0	9.0	10.0	10.0	10.0	14.0	13.0	17.0	20.0	22.0
16	20.0	17.0	13.0	9.0	10.0	10.0	10.0	13.0	13.0	17.0	21.0	22.0
17	19.0	17.0	13.0	9.0	10.0	10.0	11.0	12.0	13.0	17.0	21.0	22.0
18	19.0	17.0	13.0	9.0	10.0	---	11.0	12.0	13.0	17.0	21.0	22.0
19	19.0	17.0	12.0	9.0	10.0	---	11.0	12.0	14.0	17.0	21.0	20.0
20	19.0	16.0	12.0	9.0	10.0	---	11.0	12.0	14.0	17.0	21.0	20.0
21	19.0	16.0	12.0	9.0	10.0	10.0	11.0	12.0	14.0	17.0	---	20.0
22	19.0	16.0	12.0	9.0	10.0	10.0	11.0	12.0	14.0	17.0	---	20.0
23	18.0	16.0	12.0	9.0	10.0	10.0	11.0	12.0	14.0	17.0	---	20.0
24	18.0	16.0	12.0	9.0	10.0	10.0	11.0	12.0	14.0	17.0	21.0	20.0
25	18.0	16.0	12.0	9.0	10.0	10.0	11.0	12.0	15.0	18.0	21.0	20.0
26	18.0	14.0	12.0	9.0	10.0	10.0	11.0	12.0	15.0	19.0	21.0	20.0
27	18.0	14.0	12.0	9.0	10.0	10.0	11.0	12.0	17.0	19.0	21.0	20.0
28	18.0	14.0	12.0	9.0	10.0	10.0	11.0	12.0	17.0	19.0	22.0	20.0
29	18.0	14.0	11.0	9.0	---	10.0	12.0	12.0	17.0	19.0	22.0	20.0
30	18.0	14.0	11.0	9.0	---	10.0	12.0	13.0	17.0	20.0	22.0	20.0
31	18.0	---	10.0	9.0	---	10.0	---	13.0	---	20.0	22.0	---
MEAN	19.0	17.0	12.5	9.5	10.0	10.0	10.5	12.0	14.0	17.5	20.5	20.5

YEAR MAX 22.0 MIN 9.0 MEAN 14.5

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, ARIZ.
(National stream-quality accounting network and pesticide station)

LOCATION (revised).--Lat 33°13'45", long 112°46'00", in SE¼NE¼ sec.28, T.2 S., R.5 W., Maricopa County, at Gillespie Dam, 8 mi (13 km) downstream from Hassayampa River.

DRAINAGE AREA.--49,650 mi^2 (128,600 km^2).

PERIOD OF RECORD.--Chemical analyses: December 1950 to September 1971, March 1974 to current year.
Water temperatures: December 1950 to September 1971, April 1974 to current year.
Prior to October 1967, published as 09519500, Gila River below Gillespie Dam, Ariz.

EXTREMES.--Current year:
Specific conductance: Maximum daily, 7,600 micromhos June 18; minimum daily, 2,680 micromhos Aug. 5.
Water temperatures: Maximum, 33.0°C Aug. 19.

Period of record:
Specific conductance: Maximum daily, 13,200 micromhos July 10, 11, 1966; minimum daily, 236 micromhos Dec. 28, 1967.
Water temperatures: Maximum, 36.5°C July 8, 1958, July 22, 1959, Aug. 5, 8, 1966; minimum, 1.5°C Jan. 1, 1951.

REMARKS.--Samples are believed to be representative of total flow passing Gillespie Dam, including spill into Gila River and flow diverted into Enterprise and Gila Bend Canals.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
MAR.									
12...	1000	65	25	--	260	110	830	130	344
APR.									
23...	0900	46	23	2000	300	130	1100	11	382
MAY									
28...	1045	37	27	--	290	130	970	12	352
JUNE									
24...	1045	26	6.2	--	240	130	1100	9.2	184
JULY									
15...	1130	25	8.8	--	250	140	960	14	266
AUG.									
27...	0900	29	10	70	270	110	850	9.9	211
SEP.									
24...	1200	42	.3	--	210	100	800	12	187

DATE	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR.									
12...	0	750	1300	5.6	11	1.8	2500	3690	3630
APR.									
23...	0	1200	1600	.4	11	.41	3400	4740	4610
MAY									
28...	0	1000	1500	2.8	11	.51	3000	4240	4160
JUNE									
24...	--	1100	1500	2.7	9.4	.01	3400	4120	4220
JULY									
15...	0	1000	1400	2.2	9.5	.05	3500	4020	3950
AUG.									
27...	--	820	1300	2.6	11	.21	3000	3710	3530
SEP.									
24...	0	740	1300	2.3	9.0	.01	--	3500	3300

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, ARIZ.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)
MAR.								
12...	5.02	1100	820	11	5790	7.8	13.0	20
APR.								
23...	6.45	1300	970	13	7020	8.3	19.0	40
MAY								
28...	5.77	1300	970	12	6670	7.8	24.0	60
JUNE								
24...	5.60	1100	980	14	6500	8.3	27.0	40
JULY								
15...	5.47	1200	980	12	6500	8.1	28.0	70
AUG.								
27...	5.05	1100	950	11	6000	8.1	26.0	60
SEP.								
24...	4.76	940	780	11	5650	8.8	25.0	70

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
MAR.								
12...	1000	9.7	1.3	11	2.2	13	58	2.0
APR.								
23...	0900	11	.47	11	2.6	14	60	.81
MAY								
28...	1045	10	.52	11	1.8	13	57	1.1
JUNE								
24...	1045	--	--	9.5	3.5	13	58	.43
JULY								
15...	1130	--	--	9.8	4.2	14	62	.88
AUG.								
27...	0900	--	--	11	2.8	14	61	1.1
SEP.								
24...	1200	--	--	9.3	7.2	17	73	1.5

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
APR.				
03...	0900	--	--	280
MAY				
28...	1045	7600	3500	2400
JUNE				
24...	1045	--	1800	1250
JULY				
15...	1130	--	8700	900
AUG.				
27...	0900	--	17700	2200
SEP.				
24...	1200	--	2900	600

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, ARIZ.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	CHLORDANE IN BOTTOM DEPOSITS (UG/KG)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT IN BOTTOM DEPOSITS (UG/KG)
NOV. 15...	1030	6.0	.0	0	7.7	47	11

DATE	DIELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	PCB IN BOTTOM DEPOSITS (UG/KG)
NOV. 15...	.0	.0	.0	.0	.0	0

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DIELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
NOV. 15...	1030	6.0	.00	.0	.00	.04	.00	.00	.00	.00	.00
FEB. 11...	1215	38	.00	.0	.00	.03	.00	.01	.00	.00	.00
APR. 17...	1445	15	.00	.0	.00	.04	.00	.01	.00	.00	.00

DATE	LINDANE (UG/L)	DIAZINON (UG/L)	MALATHION (UG/L)	PARATHION (UG/L)	METHYL PARATHION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	PCB (UG/L)	TEMPERATURE (DEG C)
NOV. 15...	.00	.04	.00	.00	.00	.00	.00	.00	.0	14.0
FEB. 11...	.01	.03	.00	.00	.00	.02	.05	.00	.0	12.0
APR. 17...	.00	.04	.00	.00	.00	.00	.00	.00	.0	20.5

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, ARIZ.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
APR.												
23...	0900	8	8	0	20	0	10	1	<50	15	40	2000
AUG.												
27...	0900	8	23	0	<10	0	30	0	<50	9	50	70

DATE	TOTAL IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
APR.												
23...	5400	3	<100	110	290	.0	.0	7	0	60	280	12
AUG.												
27...	15000	2	100	40	650	.1	.1	9	10	20	100	13

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 to SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	6600	7200	6500	6400	---
2	---	---	---	---	---	---	---	6700	---	6500	2960	---
3	---	---	---	---	---	---	---	6700	7300	5500	5850	5350
4	---	---	---	---	---	---	---	6300	7600	---	---	5700
5	---	---	---	---	---	---	---	---	6700	6300	2680	5700
6	---	---	---	---	---	---	---	6300	6900	6450	5150	6000
7	---	---	---	---	---	---	---	5900	6900	---	3850	6100
8	---	---	---	---	---	---	---	6200	7000	5900	4100	---
9	---	---	---	---	---	---	---	6300	---	5600	4550	5450
10	---	---	---	---	---	---	---	6200	6600	6100	5250	4950
11	---	---	---	---	---	---	---	6300	6800	6200	---	5350
12	---	---	---	---	---	---	---	---	6900	5900	5450	5950
13	---	---	---	---	---	---	---	6800	7000	6100	5600	6250
14	---	---	---	---	---	---	---	6500	7200	---	6000	6450
15	---	---	---	---	---	---	---	6600	---	6200	5900	---
16	---	---	---	---	---	---	---	6600	---	6450	6000	6200
17	---	---	---	---	---	---	---	6900	---	6400	6200	5150
18	---	---	---	---	---	---	---	6700	7600	6100	---	5350
19	---	---	---	---	---	---	---	---	7200	6300	5600	5300
20	---	---	---	---	---	---	---	6400	7200	5900	6600	5350
21	---	---	---	---	---	---	---	6500	6400	---	6700	5300
22	---	---	---	---	---	---	---	6300	7100	6050	6400	---
23	---	---	---	---	---	---	---	6600	---	6300	6400	5200
24	---	---	---	---	---	---	6500	6600	6800	5850	6700	5400
25	---	---	---	---	---	---	6600	6800	7300	6600	---	5300
26	---	---	---	---	---	---	7200	---	5500	6000	6250	5600
27	---	---	---	---	---	---	6800	---	6300	5800	5750	5750
28	---	---	---	---	---	---	---	6800	7000	---	6150	5250
29	---	---	---	---	---	---	6300	---	6800	5950	6100	---
30	---	---	---	---	---	---	6600	6800	---	6250	6150	4700
31	---	---	---	---	---	---	---	7100	---	6600	6350	---
MEAN	---	---	---	---	---	---	---	6540	---	6150	5600	5550

YEAR MAX 7600 MIN 2680 MEAN 6160

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, ARIZ.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	20.0	24.0	29.0	30.0	---
2	---	---	---	---	---	---	---	21.0	---	28.0	28.0	---
3	---	---	---	---	---	---	---	21.0	24.0	---	29.0	29.0
4	---	---	---	---	---	---	---	21.0	25.0	---	---	29.0
5	---	---	---	---	---	---	---	---	25.0	---	28.0	29.0
6	---	---	---	---	---	---	---	20.0	25.0	---	29.0	29.0
7	---	---	---	---	---	---	---	22.0	25.0	---	30.0	29.0
8	---	---	---	---	---	---	---	23.0	25.0	---	28.0	---
9	---	---	---	---	---	---	---	22.0	---	---	28.0	28.0
10	---	---	---	---	---	---	---	22.0	26.0	---	28.0	27.0
11	---	---	---	---	---	---	---	23.0	26.0	28.0	---	27.0
12	---	---	---	---	---	---	---	---	26.0	27.0	25.0	27.0
13	---	---	---	---	---	---	---	23.0	27.0	27.0	26.0	28.0
14	---	---	---	---	---	---	---	24.0	27.0	---	28.0	27.0
15	---	---	---	---	---	---	---	24.0	---	29.0	27.0	---
16	---	---	---	---	---	---	---	24.0	---	30.0	28.0	26.0
17	---	---	---	---	---	---	---	23.0	28.0	30.0	27.0	---
18	---	---	---	---	---	---	---	23.0	27.0	29.0	---	25.0
19	---	---	---	---	---	---	---	---	27.0	29.0	33.0	25.0
20	---	---	---	---	---	---	---	20.0	27.0	27.0	28.0	25.0
21	---	---	---	---	---	---	---	21.0	27.0	---	28.0	25.0
22	---	---	---	---	---	---	---	22.0	29.0	28.0	29.0	---
23	---	---	---	---	---	---	---	24.0	---	28.0	29.0	25.0
24	---	---	---	---	---	---	18.0	25.0	29.0	29.0	29.0	25.0
25	---	---	---	---	---	---	18.0	25.0	29.0	30.0	---	27.0
26	---	---	---	---	---	---	18.0	---	30.0	30.0	29.0	27.0
27	---	---	---	---	---	---	18.0	---	30.0	28.0	27.0	25.0
28	---	---	---	---	---	---	---	25.0	30.0	---	27.0	25.0
29	---	---	---	---	---	---	20.0	---	29.0	30.0	26.0	---
30	---	---	---	---	---	---	20.0	25.0	---	30.0	22.0	25.0
31	---	---	---	---	---	---	---	24.0	---	30.0	23.0	---
MEAN	---	---	---	---	---	---	---	22.5	27.0	---	27.5	---

YEAR MAX 33.0 MIN 18.0 MEAN 26.0

09520700 GILA RIVER NEAR MOUTH, NEAR YUMA, ARIZ.

LOCATION.--Lat 32°42'45", long 114°33'09", in SW¼SE¼ sec.19, T.8 S., R.22 W., Yuma County, 0.5 mi (0.8 km) upstream from mouth, and 5 mi (8 km) east of Yuma.

DRAINAGE AREA.--58,000 mi^2 (150,000 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished chemical analyses (continuing record) for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
03...	1410	58	26	10	140	61	510	7.1	303	0	530	670
15...	1110	51	19	--	149	59	470	8.1	296	0	480	640
NOV.												
05...	1330	48	25	40	160	60	480	7.8	295	0	470	660
19...	1400	50	25	10	150	59	490	7.6	295	0	480	660
DEC.												
03...	1100	50	26	10	150	57	510	7.1	296	0	470	660
17...	1305	51	26	10	150	58	470	7.7	297	0	490	660
JAN.												
07...	1100	50	25	0	130	55	440	6.1	293	0	480	580
21...	1330	20	24	10	110	47	480	6.2	295	5	550	490
FEB.												
04...	1300	80	25	10	140	59	460	7.2	291	0	480	640
19...	1110	32	25	10	150	59	480	9.7	291	0	440	660
MAR.												
04...	1430	35	25	10	150	58	490	7.6	296	0	480	660
18...	1440	50	25	10	150	58	470	7.3	298	0	490	660
APR.												
01...	1345	50	24	10	150	60	480	7.3	297	0	500	590
15...	1330	35	25	10	150	60	470	9.4	285	0	500	650
MAY												
06...	1345	60	25	10	150	58	450	8.6	290	0	460	630
20...	1415	50	23	20	150	57	450	6.5	291	0	450	650
JUNE												
03...	1405	50	25	10	150	59	470	6.6	296	0	450	650
17...	1305	60	26	10	190	35	570	7.0	310	0	500	760
JULY												
01...	1310	60	25	10	160	65	510	8.8	299	0	470	730
22...	1310	55	26	40	160	64	520	7.6	306	0	480	730
AUG.												
05...	1320	60	26	0	160	60	520	8.9	303	0	460	740
SEP.												
03...	1420	60	25	20	140	51	450	6.5	289	--	450	580
16...	1345	80	24	30	130	49	400	8.0	276	--	480	500

09520700 GILA RIVER NEAR MOUTH, NEAR YUMA, ARIZ.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
03...	.9	.54	720	2090	2100	2.84	600	350	9.1	3340	7.9	24.5
15...	.8	--	--	1980	1970	2.69	615	372	8.2	3230	8.0	--
NOV.												
05...	.8	.81	650	1990	2010	2.71	650	400	8.2	3270	8.0	24.0
19...	.8	.80	490	1950	2020	2.65	620	380	8.6	3270	8.1	22.0
DEC.												
03...	.9	.85	670	1980	2030	2.69	610	370	9.0	3280	7.9	21.5
17...	.9	.90	200	2050	2010	2.79	610	370	8.3	3260	7.9	20.5
JAN.												
07...	1.0	.84	670	1940	1870	2.64	550	310	8.2	3030	8.1	22.0
21...	1.4	1.4	780	1830	1870	2.49	470	220	9.7	2950	8.4	20.5
FEB.												
04...	.8	.55	660	1990	1960	2.71	590	350	8.2	3230	8.0	23.5
19...	1.0	.75	690	1920	1970	2.61	620	380	8.4	3280	7.9	23.0
MAR.												
04...	1.0	.78	680	2020	2020	2.75	610	370	8.6	3260	8.0	23.0
18...	1.0	.61	660	2000	2010	2.72	610	370	8.3	3250	7.9	24.0
APR.												
01...	1.1	.84	670	2050	1960	2.79	620	380	8.4	3300	7.9	24.0
15...	1.1	.55	670	1960	2010	2.67	620	390	8.2	3240	8.0	24.5
MAY												
06...	1.1	.53	680	1960	1930	2.67	610	380	7.9	3210	8.0	25.0
20...	.9	.55	680	1980	1930	2.69	610	370	7.9	3230	8.0	24.5
JUNE												
03...	.8	.55	670	2030	1960	2.67	620	370	8.2	3260	7.9	25.0
17...	.9	.72	810	2370	2250	3.06	620	360	10	3800	8.0	24.5
JULY												
01...	.9	.66	760	2250	2120	3.06	670	420	8.6	3570	8.0	25.5
22...	.9	.98	750	2170	2140	2.95	660	410	8.8	3540	8.0	25.0
AUG.												
05...	.9	.69	730	2200	2130	2.99	650	400	8.9	3550	7.9	25.5
SEP.												
03...	1.0	.74	720	1900	1850	2.58	560	320	8.3	3040	--	26.0
16...	1.0	.69	630	1780	1730	2.42	530	300	7.6	2840	--	25.0

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	ALDRIN (UG/L)	CHLOR-DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)
NOV., 1973												
27...	1600	50	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOX-APHENE (UG/L)	DI-AZINON (UG/L)	MALA-THION (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	PCB (UG/L)	TEMPER-ATURE (DEG C)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV., 1973											
27...	0	.00	.00	.00	.00	.00	.00	.00	.0	22.0	.0

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CALIF.
(National stream-quality accounting network station)

LOCATION.--Lat 32°43'07", long 114°43'05", in NE¼SE¼ sec.21, T.8 S., R.24 W., Gila and Salt River meridian, in Arizona, Yuma County, at gaging station on left bank, at northerly international boundary, 0.5 mi (0.8 km) east of Andrade, 1.1 mi (1.8 km) upstream from Morelos Dam, 1.1 mi (1.8 km) downstream from Rockwood Gate, 20.7 mi (33.3 km) upstream from southerly international boundary, and 21 mi (34 km) downstream from Laguna Dam.

DRAINAGE AREA.--243,000 mi^2 (629,400 km^2), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
01...	0730	1270	12	106	39	200	7.0	204	0	385	210
09...	0730	1290	14	110	39	210	7.0	208	0	395	225
15...	0730	1310	12	110	38	200	6.7	208	0	385	210
23...	0800	670	14	117	38	230	7.0	230	0	405	242
29...	0800	720	15	114	40	225	7.2	230	0	405	238
NOV.											
05...	0800	665	14	116	41	230	6.9	232	0	410	250
12...	0800	705	12	114	35	210	6.8	220	0	400	208
19...	0800	874	12	117	37	220	6.2	226	0	405	228
26...	0800	1090	12	116	39	225	6.3	230	0	405	238
DEC.											
03...	0800	1540	12	110	37	200	6.3	210	0	395	200
10...	0800	1780	12	106	39	200	6.1	210	0	395	200
17...	0800	1990	11	106	37	190	6.4	202	0	380	190
26...	0800	2060	10	110	37	200	6.2	210	0	395	200
JAN.											
02...	0800	1390	12	111	37	210	6.9	208	0	400	218
07...	0800	1000	12	108	38	205	6.8	216	0	400	200
14...	0800	1130	11	114	38	200	7.2	224	0	400	200
21...	0800	1270	12	121	38	220	6.9	232	0	420	218
28...	0800	1450	11	107	37	200	6.5	210	0	395	195
FEB.											
04...	0800	1120	13	106	38	195	6.6	208	0	380	202
11...	0800	1330	12	106	37	190	6.4	204	0	380	195
19...	0800	1770	11	105	37	185	7.0	198	0	375	192
25...	0800	1880	12	108	37	190	6.5	208	0	380	198
MAR.											
04...	0800	2200	11	102	35	175	6.7	194	0	365	175
11...	0800	2560	10	102	34	170	6.6	194	0	365	165
18...	0800	3030	10	102	34	170	6.4	194	0	365	165
25...	0800	3300	10	99	34	155	6.4	186	0	355	148
APR.											
01...	0800	3320	10	102	33	155	6.5	190	0	355	150
08...	0800	3350	9.0	98	33	150	7.0	184	0	350	140
15...	0800	3350	10	97	35	150	6.6	186	0	350	140
22...	0810	2420	9.0	102	33	155	7.1	192	0	355	150
29...	0800	2220	7.0	102	33	160	6.5	192	0	355	155
MAY											
06...	0800	1500	8.0	106	33	175	6.7	204	0	365	168
13...	0800	1320	8.0	105	35	175	6.7	202	0	370	168
20...	0830	1320	8.0	106	34	175	6.7	204	0	370	168
28...	0830	1340	9.0	102	35	170	6.8	204	0	370	162
JUNE											
03...	0815	1800	9.0	105	35	175	6.8	200	0	370	170
10...	0815	1660	9.0	104	35	175	6.8	200	0	370	170
17...	0810	1910	8.0	105	36	180	6.7	198	0	375	178
24...	0815	2330	9.0	102	34	170	6.7	192	0	365	165
JULY											
01...	0815	2830	9.0	98	35	160	7.0	188	0	360	155
08...	0800	3110	8.0	99	34	155	7.0	180	0	355	150
15...	0830	3110	9.0	96	35	160	7.2	186	0	355	152
22...	0830	2940	8.0	97	36	160	6.6	188	0	360	155
29...	0805	2860	8.0	95	36	160	7.0	188	0	355	152
AUG.											
05...	0830	3340	9.0	92	34	150	6.7	176	0	350	140
12...	0830	2980	9.0	92	34	150	6.7	178	0	350	140
19...	0830	2810	9.0	94	37	165	7.1	184	0	365	155
26...	0820	2720	8.0	99	35	170	6.7	188	0	365	162
SEP.											
03...	0820	1340	10	101	36	190	6.7	200	0	385	182
09...	0800	1320	10	100	37	185	6.8	198	0	380	180
16...	0815	1400	9.0	103	35	180	6.9	202	0	375	175
23...	0830	1320	9.0	100	37	185	6.7	198	0	380	178
30...	0800	1320	10	105	37	190	6.7	208	0	380	192

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, .
ABOVE NORELOS DAM, NEAR ANDRADE, CALIF.--Continued

EXTREMES.--Current year:
Specific conductance: Maximum, 1,940 micromhos Nov. 8; minimum, 1,350 micromhos Aug. 7.

Period of record:
Specific conductance (1969-74): Maximum, 2,230 micromhos Dec. 9, 1969; minimum, 1,310 micromhos Oct. 1, 1971.

REMARKS.--Unpublished chemical analyses (continuing record) for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.											
01...	.7	1070	1060	1.46	425	258	4.2	1690	8.1	--	5
09...	.7	1100	1100	1.50	435	264	4.4	1740	8.1	--	5
15...	.6	1070	1070	1.46	430	260	4.2	1690	8.1	--	10
23...	.6	1200	1170	1.63	450	262	4.7	1850	8.1	--	1
29...	.6	1180	1160	1.60	450	262	4.6	1840	8.1	--	1
NOV.											
05...	.7	1220	1180	1.66	460	270	4.7	1880	8.1	--	2
12...	.6	1100	1100	1.50	430	250	4.4	1740	8.1	--	3
19...	.6	1150	1140	1.56	445	260	4.5	1810	8.1	--	1
26...	.5	1170	1160	1.59	450	262	4.6	1830	8.1	--	1
DEC.											
03...	.6	1070	1070	1.46	425	253	4.2	1690	8.1	--	2
10...	.5	1120	1060	1.52	425	253	4.2	1680	8.1	--	2
17...	.6	1020	1020	1.39	415	250	4.0	1610	8.0	--	2
26...	.5	1040	1060	1.41	425	253	4.2	1680	8.1	--	0
JAN.											
02...	.4	1130	1100	1.54	430	260	4.4	1740	8.1	--	3
07...	.7	1090	1080	1.48	425	248	4.3	1700	8.1	--	1
14...	.7	1100	1080	1.50	440	256	4.1	1720	8.1	--	4
21...	.7	1150	1150	1.56	450	260	4.5	1810	8.1	--	2
28...	.6	1060	1060	1.44	420	248	4.2	1670	8.0	--	3
FEB.											
04...	.7	1060	1050	1.44	420	250	4.1	1660	8.0	--	2
11...	.7	1040	1030	1.41	415	248	4.0	1620	8.1	--	2
19...	.7	1010	1010	1.37	415	252	4.0	1600	8.1	--	3
25...	.6	1040	1040	1.41	420	250	4.0	1640	8.0	--	3
MAR.											
04...	.6	990	987	1.35	400	241	3.8	1530	8.0	--	3
11...	.6	980	950	1.33	395	236	3.7	1500	8.1	--	4
18...	.6	948	950	1.29	395	236	3.7	1500	8.1	--	5
25...	.6	902	901	1.23	385	232	3.4	1420	8.1	--	4
APR.											
01...	.6	912	907	1.24	390	234	3.4	1430	8.1	--	5
08...	.7	878	880	1.19	380	229	3.3	1390	7.9	--	2
15...	.6	882	882	1.20	385	232	3.3	1390	8.0	--	3
22...	.6	914	908	1.24	390	232	3.4	1430	8.1	--	2
29...	.7	912	914	1.24	390	232	3.5	1440	8.1	--	2
MAY											
06...	.7	976	984	1.33	400	232	3.8	1530	8.0	22.0	2
13...	.7	980	969	1.33	405	240	3.8	1540	8.0	--	2
20...	.0	974	970	1.32	405	238	3.8	1530	8.1	19.5	3
28...	.0	960	958	1.31	400	232	3.7	1510	8.1	--	2
JUNE											
03...	.6	974	971	1.32	405	241	3.8	1530	--	--	3
10...	.6	974	970	1.32	405	241	3.8	1530	--	28.0	3
17...	.7	984	988	1.34	410	248	3.9	1560	--	24.5	2
24...	.7	946	948	1.29	395	238	3.7	1490	--	28.0	2
JULY											
01...	.7	926	919	1.26	390	236	3.5	1450	--	26.0	2
08...	.6	902	899	1.23	385	238	3.4	1420	--	26.5	3
15...	.7	916	908	1.25	385	232	3.6	1430	--	27.0	3
22...	.7	918	917	1.25	390	236	3.5	1450	--	29.5	2
29...	.7	920	908	1.25	385	231	3.5	1440	--	29.0	1
AUG.											
05...	.6	872	870	1.19	370	226	3.4	1380	--	29.5	2
12...	.5	874	871	1.19	370	224	3.4	1380	--	28.5	3
19...	.7	930	925	1.26	385	234	3.6	1460	--	29.5	1
26...	.7	952	940	1.29	390	236	3.7	1480	--	29.0	1
SEP.											
03...	.8	1030	1010	1.40	400	236	4.1	1600	--	26.5	1
09...	.7	1000	998	1.36	400	238	4.0	1580	--	28.0	1
16...	.6	996	986	1.35	400	234	3.9	1560	--	27.0	2
23...	.5	1000	995	1.36	400	238	4.0	1570	--	24.5	1
30...	.7	1060	1030	1.47	415	244	4.1	1630	--	27.0	1

. 09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CALIF.--Continued

NUTRIENT ANALYSES (NITROGEN AND PHOSPHORUS COMPOUNDS), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.								
18...	0730	--	--	--	--	--	.25	--
NOV.								
14...	0600	896	--	--	--	--	.37	--
DEC.								
19...	0600	1950	--	--	--	--	.33	--
JAN.								
18...	0630	--	--	--	--	--	.37	--
FEB.								
13...	0830	1440	--	--	--	--	.31	--
MAR.								
27...	0830	3330	.24	.22	.02	.01	.26	.23
APR.								
24...	0830	2410	.28	.19	.04	.03	.32	.22
MAY								
15...	0830	1300	.27	.26	.01	.01	.28	.27
JUNE								
12...	0845	1860	--	--	--	--	.00	--
JULY								
10...	0900	3100	--	--	--	.00	.18	.17
24...	0900	2910	.56	--	.01	--	.57	--
AUG.								
14...	0840	2850	.21	--	.03	.00	.24	.16
28...	0830	2470	.18	.17	.01	.00	.19	.17
SEP.								
10...	0830	1320	.24	--	.02	.01	.26	.26
25...	0915	1290	.55	.43	.01	.01	.56	.44

DATE	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)
OCT.							
18...	--	--	.38	.63	2.8	.08	--
NOV.							
14...	--	--	.42	.79	3.5	.08	--
DEC.							
19...	--	--	.44	.77	3.4	.05	--
JAN.							
18...	--	--	.39	.76	3.4	.05	--
FEB.							
13...	--	--	.50	.81	3.6	.07	--
MAR.							
27...	--	--	.55	.81	3.6	.04	--
APR.							
24...	--	--	.04	.36	1.6	.05	--
MAY							
15...	.08	.19	.25	.53	2.3	.08	.03
JUNE							
12...	.11	.33	.44	.44	1.9	.03	--
JULY							
10...	--	--	.28	.46	2.0	.05	--
24...	.13	.16	.29	.66	3.8	.02	--
AUG.							
14...	.12	.35	.47	.71	3.1	.05	.05
28...	.10	.39	.49	.68	3.0	.03	--
SEP.							
10...	.18	.27	.45	.71	3.1	.07	--
25...	.19	.29	.48	1.0	4.6	.09	--

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CALIF.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL PHYTOPLANKTON (CELLS PER ML)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)	UNCORRECTED PERIPHYTON CHLOROPHYLL A MG/SQ M	UNCORRECTED PERIPHYTON CHLOROPHYLL B MG/SQ M	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT.										
17...	0730	1240	--	--	--	--	--	--	870	1200
18...	0730	--	550	--	--	--	--	--	--	--
NOV.										
14...	0500	896	310	--	--	--	--	--	2000	4800
15...	0400	876	--	--	--	--	--	--	2700	3000
DEC.										
18...	0900	1570	--	--	--	--	--	--	87	840
19...	0800	1950	220	--	--	--	--	--	--	--
JAN.										
18...	0800	941	--	--	--	--	--	7500	93	1200
19...	0830	--	300	--	--	--	--	--	--	--
FEB.										
12...	0945	1330	--	--	--	--	--	8000	97	330
13...	0830	1440	870	--	--	--	--	--	--	--
MAR.										
26...	0800	3300	--	--	--	--	--	6000	41	220
27...	0830	3330	14000	--	--	--	--	--	--	--
APR.										
23...	0930	2410	630	--	--	--	--	2000	170	92
MAY										
15...	0830	1300	2000	--	--	--	--	8000	1400	620
JUNE										
12...	0845	1600	1900	1.5	4.1	--	--	4000	200	63
JULY										
10...	0900	3100	2400	.1	.0	--	--	--	--	--
11...	0900	3100	--	--	--	--	--	--	42	25
AUG.										
14...	0840	2830	1500	.0	.0	129	.1	--	--	--
15...	0900	2830	--	--	--	--	--	--	38	65
28...	0830	2470	--	--	--	--	--	--	--	--
SEP.										
11...	0930	1320	3000	3.0	2.5	--	--	--	190	340
27...	0915	1270	--	--	--	--	--	--	--	--

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DIELDRIN (UG/L)
OCT.								
18...	0800	1320	.00	.0	.00	.00	.00	.00
NOV.								
14...	0800	896	.00	.0	.00	.00	.00	.00
DEC.								
19...	0800	1950	.00	.0	.00	.00	.00	.00
JAN.								
18...	0830	--	.00	.0	.00	.00	.00	.00
FEB.								
13...	0830	1440	.00	.0	.00	.00	.00	.00
MAR.								
27...	0830	3330	.00	.0	.00	.00	.00	.00
APR.								
24...	0830	--	.00	.0	.00	.00	.00	.00
MAY								
15...	0830	1300	.00	.0	.00	.00	.00	.00
JUNE								
26...	0830	2710	.00	.0	.00	.00	.00	.00
JULY								
10...	0900	3100	.00	.0	.00	.00	.00	.00
AUG.								
14...	0840	2850	.00	.0	.00	.00	.00	.00
SEP.								
10...	0830	1320	.00	.0	.00	.00	.00	.00

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09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE NORELOS DAM, NEAR ANDRADE, CALIF.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	TOX-APHENE (UG/L)	DI-AZINON (UG/L)	ETHION (UG/L)	MALA-THION (UG/L)	PARA-THION (UG/L)
OCT. 18...	.00	.00	.00	.00	0	.01	--	.00	.00
NOV. 14...	.00	.00	.00	.00	0	.00	--	.00	.00
DEC. 19...	.00	.00	.00	.00	0	.00	--	.00	.00
JAN. 18...	.00	.00	.00	.00	0	.01	--	.00	.00
FEB. 13...	.00	.00	.00	.00	0	.00	--	.00	.00
MAR. 27...	.00	.00	.00	.00	0	.01	--	.00	.00
APR. 24...	.00	.00	.00	.00	0	.00	.00	.00	.00
MAY 15...	.00	.00	.00	.00	0	.01	.00	.00	.00
JUNE 26...	.00	.00	.00	.00	0	.00	.00	.00	.00
JULY 10...	.00	.00	.00	.00	0	.00	.00	.00	.00
AUG. 14...	.00	.00	.00	.00	0	.00	--	.00	.00
SEP. 10...	.00	.00	.00	.00	0	.00	--	.00	.00

DATE	METHYL PARA-THION (UG/L)	TRI-THION (UG/L)	METHYL TRI-THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	PCB (UG/L)	TEMPER-ATURE (DEG C)
OCT. 18...	.00	--	--	.00	.00	.00	.0	21.0
NOV. 14...	.00	--	--	.02	.00	.00	.0	17.0
DEC. 19...	.00	--	--	.00	.00	.00	.0	13.5
JAN. 18...	.00	--	--	.00	.00	.00	.0	14.5
FEB. 13...	.00	--	--	.00	.00	.00	.0	12.5
MAR. 27...	.00	--	--	.05	.00	.00	.0	18.0
APR. 24...	.00	.00	.00	.00	.00	.00	.0	20.0
MAY 15...	.00	.00	.00	.09	.00	.00	.0	23.0
JUNE 26...	.00	.00	.00	.00	.00	.00	.0	28.5
JULY 10...	.00	.00	.00	.00	.00	.00	.0	25.5
AUG. 14...	.00	--	--	.00	.00	.00	.0	26.5
SEP. 10...	.00	--	--	.00	.03	.00	.0	29.0

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CALIF.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)
OCT.												
18...	0730	--	2	--	2	--	1	--	<10	--	0	--
NOV.												
14...	0800	896	5	--	5	--	1	--	<10	--	0	--
28...	0600	1161	--	--	--	--	--	--	--	--	--	--
28...	1000	1150	--	--	--	--	--	--	--	--	--	--
28...	1200	1150	--	--	--	--	--	--	--	--	--	--
28...	1400	1138	--	--	--	--	--	--	--	--	--	--
28...	1600	1126	--	--	--	--	--	--	--	--	--	--
28...	1800	1104	--	--	--	--	--	--	--	--	--	--
28...	2000	1104	--	--	--	--	--	--	--	--	--	--
28...	2200	1092	--	--	--	--	--	--	--	--	--	--
28...	2400	1104	--	--	--	--	--	--	--	--	--	--
29...	0200	1115	--	--	--	--	--	--	--	--	--	--
29...	0400	1126	--	--	--	--	--	--	--	--	--	--
29...	0600	1115	--	--	--	--	--	--	--	--	--	--
29...	0800	1115	--	--	--	--	--	--	--	--	--	--
FEB.												
13...	0830	1440	4	--	3	--	0	--	<10	--	0	--
MAR.												
27...	0830	3330	--	--	--	200	--	--	--	--	--	--
APR.												
24...	0830	2410	--	--	--	230	--	--	--	--	--	--
MAY												
15...	0830	1300	5	0	1	230	0	<10	<10	100	10	50
JUNE												
12...	0845	1860	--	--	--	240	--	--	--	--	--	--
JULY												
10...	0900	3100	--	--	--	220	--	--	--	--	--	--
24...	0900	2910	--	--	--	--	--	--	--	--	--	--
AUG.												
14...	0840	2850	2	1	3	210	<1	9	10	--	0	0
28...	0830	2470	--	--	--	220	--	--	--	--	--	--
SEP.												
10...	0830	1320	--	--	--	260	--	--	--	--	--	--
25...	0915	1290	--	--	--	270	--	--	--	--	--	--

DATE	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	SUSPENDED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)
OCT.												
18...	0	1	--	<25	4	--	<10	110	470	8	--	<50
NOV.												
14...	0	0	--	50	2	--	10	40	310	9	--	<100
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
FEB.												
13...	0	1	--	<50	4	--	10	170	600	9	--	<100
MAR.												
27...	--	--	--	--	--	--	--	--	--	--	--	--
APR.												
24...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
15...	60	0	<50	<50	8	12	20	10	400	14	<86	<100
JUNE												
12...	--	--	--	--	--	--	--	--	220	--	--	--
JULY												
10...	--	--	--	--	--	--	--	--	390	--	--	--
24...	--	--	--	--	--	--	--	--	590	--	--	--
AUG.												
14...	0	0	<50	<50	5	5	10	30	380	13	<87	<100
28...	--	--	--	--	--	--	--	--	280	--	--	--
SEP.												
10...	--	--	--	--	--	--	--	--	490	--	--	--
25...	--	--	--	--	--	--	--	--	470	--	--	--

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CALIF.--Continued

MINOR ELEMENTS AND OTHER CONSTITUENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974--Continued

DATE	TOTAL MAGNESIUM (MG) (MG/L)	DISSOLVED MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL POTASSIUM (K) (MG/L)	DISSOLVED SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SODIUM (NA) (MG/L)
OCT.												
18...	--	20	--	110	.5	--	3.1	--	4	--	17	--
NOV.												
14...	--	10	--	110	.0	--	.0	--	6	--	5	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
FEB.												
13...	--	38	--	140	.0	--	.0	--	4	--	4	--
MAR.												
27...	--	--	--	--	--	--	--	--	--	--	--	--
APR.												
24...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
15...	34	150	0	110	.0	--	--	5.0	0	--	4	160
JUNE												
12...	--	--	--	--	--	--	--	--	--	--	--	--
JULY												
10...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
AUG.												
14...	--	0	40	40	.1	.0	.1	--	2	0	1	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP.												
10...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL NONFILTRABLE RESIDUE (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)
OCT.												
18...	20	--	20	--	--	--	--	5	--	--	--	--
NOV.												
14...	20	--	30	--	--	--	17.0	--	--	--	--	--
20...	--	--	--	--	--	--	13.0	--	9.0	--	--	--
20...	--	--	--	--	--	--	13.0	--	9.4	--	--	--
20...	--	--	--	--	--	--	14.0	--	9.5	--	--	--
20...	--	--	--	--	--	--	15.5	--	9.5	--	--	--
20...	--	--	--	--	--	--	16.0	--	9.4	--	--	--
20...	--	--	--	--	--	--	15.5	--	9.2	--	--	--
20...	--	--	--	--	--	--	15.5	--	9.0	--	--	--
20...	--	--	--	--	--	--	15.0	--	9.1	--	--	--
20...	--	--	--	--	--	--	15.0	--	8.7	--	--	--
20...	--	--	--	--	--	--	15.0	--	8.8	--	--	--
29...	--	--	--	--	--	--	14.0	--	8.8	--	--	--
29...	--	--	--	--	--	--	14.0	--	8.9	--	--	--
29...	--	--	--	--	--	--	14.0	--	8.9	--	--	--
29...	--	--	--	--	--	--	14.0	--	8.9	--	--	--
FEB.												
13...	10	--	20	--	--	--	12.5	--	--	--	--	--
MAR.												
27...	--	--	--	--	--	7.8	18.0	--	7.7	--	--	--
APR.												
24...	--	--	--	--	--	7.9	20.0	2	7.7	--	--	--
MAY												
15...	10	10	20	5	--	7.6	23.0	3	7.5	12	--	4
JUNE												
12...	--	--	--	2	1520	7.6	26.0	--	6.7	9	2.3	0
JULY												
10...	--	--	--	10	1450	7.7	25.5	--	6.9	9	2.6	0
24...	--	--	--	13	--	--	29.0	--	--	9	--	--
AUG.												
14...	10	100	110	15	1400	7.6	26.5	--	6.4	7	5.1	--
28...	--	--	--	6	--	--	27.0	--	--	6	3.4	--
SEP.												
10...	--	--	--	10	1590	8.0	29.0	--	7.3	8	6.0	--
25...	--	--	--	8	--	--	26.0	--	--	6	2.7	--

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY,
ABOVE MORELOS DAM, NEAR ANDRADE, CALIF.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	1910	1740	1640	1560	1570	1430	1440	1510	1450	1410	1650
2	1590	1870	1740	1740	1690	1550	1390	1430	1500	1440	1400	1620
3	1590	1820	1690	1740	1610	1550	1380	1450	1530	1440	1400	1600
4	1670	1840	1720	1820	1660	1530	1410	1470	1540	1420	1400	1560
5	1680	1880	1730	1710	1650	1560	1400	1540	1510	1440	1380	1540
6	1680	1890	1680	1690	1650	1570	1390	1530	1530	1440	1380	1550
7	1680	1910	1610	1700	1690	1570	1400	1510	1520	1420	1350	1550
8	1710	1940	1600	1660	1660	1550	1390	1500	1560	1420	1410	1570
9	1740	1820	1640	1520	1670	1530	1400	1500	1560	1410	1390	1580
10	1690	1820	1680	1490	1680	1550	1390	1500	1530	1420	1400	1580
11	1680	1810	1650	1600	1620	1500	1390	1510	1570	1460	1380	1550
12	1660	1740	1630	1610	1610	1510	1400	1530	1540	1440	1380	1560
13	1680	1790	1610	1630	1620	1500	1430	1540	1550	1410	1360	1560
14	1680	1760	1610	1720	1620	1480	1390	1500	1540	1420	1390	1550
15	1690	1800	1570	1810	1630	1510	1390	1510	1580	1430	1440	1600
16	1670	1810	1600	1890	1620	1510	1390	1590	1630	1410	1420	1560
17	1680	1790	1610	1940	1650	1510	1400	1500	1560	1400	1410	1550
18	1650	1790	1560	1920	1590	1500	1420	1490	1560	1420	1450	1550
19	1650	1810	1530	1870	1600	1490	1490	1520	1540	1410	1460	1570
20	1670	1840	1580	1850	1590	1460	1430	1530	1580	1400	1460	1570
21	1770	1790	1550	1810	1570	1410	1440	1500	1530	1430	1440	1570
22	1840	1760	1600	1860	1600	1400	1430	1510	1510	1450	1450	1570
23	1850	1790	1630	1840	1620	1420	1420	1510	1540	1470	1460	1570
24	1800	1810	1640	1800	1650	1470	1440	1510	1490	1460	1450	1550
25	1790	1820	1690	1710	1640	1420	1430	1510	1470	1470	1470	1560
26	1850	1830	1680	1710	1610	1390	1450	1530	1450	1480	1480	1590
27	1860	1830	1640	1690	1600	1400	1440	1560	1450	1500	1470	1600
28	1860	1790	1560	1670	1580	1410	1450	1510	1430	1470	1460	1640
29	1840	1830	1550	1540	---	1400	1440	1490	1390	1440	1460	1620
30	1860	1790	1580	1510	---	1490	1440	1530	1450	1430	1510	1630
31	1850	---	1600	1550	---	1480	---	1540	---	1430	1580	---
MEAN	1730	1820	1630	1720	1620	1490	1420	1510	1520	1440	1430	1580

YEAR MAX 1940 MIN 1350 MEAN 1570

09522200 COLORADO RIVER AT SOUTHERLY INTERNATIONAL BOUNDARY, NEAR SAN LUIS, ARIZ.

LOCATION.--Lat 32°29'48", long 114°48'48", at gaging station on right bank, in Mexico, 0.2 mi (0.3 km) upstream from southerly international boundary, 2 mi (3 km) west of San Luis, Ariz., 19.4 mi (31.2 km) downstream from Morelos Dam, and 20.5 mi (33.0 km) downstream from northerly international boundary.

DRAINAGE AREA.--243,000 mi^2 (629,400 km^2), approximately.

PERIOD OF RECORD.--October 1968 to current year.

REMARKS.--Unpublished chemical analyses (continuing record) for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT. 02...	1230	205	29	0	230	100	1000	9.9	336	0	920	1300
NOV. 06...	1150	249	24	10	220	95	880	11	303	0	840	1200
DEC. 04...	1150	249	26	10	220	98	900	9.6	338	0	880	1200
JAN. 08...	1030	254	28	10	210	93	930	10	361	0	880	1300
FEB. 05...	1030	76	25	0	210	95	780	9.9	331	0	850	1000
MAR. 05...	1030	232	28	20	230	100	960	11	330	0	920	1300
APR. 02...	1110	227	25	30	220	100	940	11	319	0	890	1300
MAY 07...	1130	227	27	20	230	100	940	12	324	0	930	1300
JUNE 04...	1150	42	16	20	160	74	560	7.8	230	0	710	700
JULY 02...	1150	214	29	30	220	100	950	12	336	0	880	1200
AUG. 06...	1130	197	29	10	220	100	900	11	332	--	880	1200
SEP. 03...	1130	172	28	20	200	90	920	9.8	334	--	880	1200

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 02...	2.1	1.7	2000	3730	3770	5.07	990	710	14	5780	7.9	24.0
NOV. 06...	1.0	1.8	1600	3370	3430	4.58	940	690	12	5380	7.9	18.0
DEC. 04...	1.6	2.1	1600	3620	3510	4.92	950	680	13	5580	7.8	14.0
JAN. 08...	2.1	2.3	1700	3610	3640	4.91	910	610	13	5670	7.8	14.5
FEB. 05...	1.4	1.5	1300	3180	3140	4.32	920	640	11	4990	7.8	15.5
MAR. 05...	3.0	2.4	1800	3860	3730	5.07	990	720	13	5890	7.7	15.0
APR. 02...	2.3	1.9	750	3810	3650	5.18	960	700	13	5920	7.7	19.5
MAY 07...	2.1	1.9	1800	3840	3710	5.22	990	720	13	5920	7.7	24.0
JUNE 04...	1.0	.03	970	2410	2340	3.28	700	520	9.2	3720	7.7	27.0
JULY 02...	2.2	2.0	1800	3840	3570	5.22	960	690	13	5830	7.8	28.[illegible]
AUG. 06...	2.2	2.1	1800	3710	3520	5.05	960	690	13	5660	--	30.5
SEP. 03...	2.2	3.9	1700	3650	3510	4.96	870	600	14	5540	--	28.5

09522500 GILA GRAVITY MAIN CANAL AT IMPERIAL DAM, ARIZ.-CALIF.

LOCATION.--Lat 32°52'34", long 114°27'18", in SE¼SW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian, in Arizona, Yuma County, at gaging station on right bank, 0.6 mi (1.0 km) downstream from intake at east end of Imperial Dam.

PERIOD OF RECORD.--Chemical analyses: October 1967 to current year (partial-record station).
Water temperatures: January 1956 to current year.

EXTREMES.--Current year:
Water temperatures: Maximum, 30.5°C on several days during June, July, and August; minimum, 10.0°C on several days during January and February.

Period of record:
Water temperatures: Maximum, 33.0°C Aug. 29-31, 1970; minimum, 7.0°C Jan. 13-17, 1964, Jan. 4-7, 1971.

REMARKS.--Temperature probe above water surface Nov. 24 to Nov. 30, Dec. 24, 25. Unpublished chemical analyses (partial record) for water years 1965-67 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT. 03...	1155	1260	9.6	10	89	32	140	5.5	163	0	340	120
JAN. 02...	1130	986	11	10	99	35	150	5.3	184	0	360	140
APR. 03...	1215	1700	9.6	10	92	32	140	5.1	174	0	330	120
JULY 03...	1300	2140	9.1	10	90	31	130	6.1	172	0	320	110

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 03...	.5	.03	200	834	817	1.13	350	220	3.2	1270	8.1	23.5
JAN. 02...	.5	.31	190	924	893	1.26	390	240	3.3	1400	8.2	9.5
APR. 03...	.5	.18	170	848	816	1.15	360	220	3.2	1300	8.2	17.5
JULY 03...	.4	.10	180	838	782	1.14	350	210	3.0	1270	8.0	28.0

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

09522500 GILA GRAVITY MAIN CANAL AT IMPERIAL DAM, ARIZ.-CALIF.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	24.5	24.5	16.5	16.5	13.0	12.0	10.5	10.5	12.0	11.5	16.0	15.5
2	24.5	24.5	16.5	16.5	13.0	13.0	10.5	10.0	12.0	12.0	16.5	16.0
3	24.5	24.0	16.5	16.5	13.0	13.0	10.5	10.0	11.5	11.5	16.0	16.0
4	24.0	23.5	16.5	16.5	12.5	12.0	10.0	10.0	11.0	11.0	15.5	15.0
5	23.5	23.5	16.5	16.0	12.0	12.0	10.0	10.0	10.5	10.5	15.0	14.0
6	23.5	23.5	16.0	16.0	12.0	12.0	10.5	10.5	10.0	10.0	14.0	14.0
7	23.5	23.5	16.0	16.0	12.0	12.0	10.5	10.5	10.0	10.0	14.0	14.0
8	23.5	23.5	16.5	16.0	12.0	12.0	11.0	11.0	10.0	10.0	14.5	14.5
9	23.5	23.0	16.5	16.5	12.0	12.0	11.5	11.0	11.0	10.0	14.5	14.5
10	23.5	22.0	16.5	16.5	13.0	13.0	12.0	11.5	10.5	10.5	15.0	14.5
11	22.0	21.5	17.0	16.5	13.0	13.0	12.0	12.0	10.5	10.5	15.5	15.5
12	21.5	21.5	18.0	17.0	13.0	13.0	13.0	12.0	11.0	10.5	16.0	15.5
13	21.5	21.5	18.0	18.0	13.0	13.0	13.0	13.0	12.0	11.5	17.0	16.0
14	22.0	22.0	18.0	16.5	13.5	13.0	13.5	13.0	12.5	12.0	17.5	17.0
15	23.0	22.0	16.5	16.5	13.5	13.5	13.5	13.5	13.0	13.0	18.0	17.5
16	23.5	23.0	16.5	16.0	13.5	13.5	14.0	13.5	13.5	13.0	19.0	18.0
17	24.0	23.5	16.0	15.5	13.5	13.5	14.5	14.0	13.5	13.5	19.0	19.0
18	24.0	23.5	15.5	15.5	13.5	13.5	15.0	14.5	14.0	14.0	19.0	19.0
19	24.0	23.5	15.0	14.5	14.0	13.5	15.5	15.0	14.0	14.0	19.0	19.0
20	23.5	23.5	14.5	14.0	13.5	13.5	15.5	15.5	14.5	14.0	19.0	19.0
21	23.5	23.5	14.0	13.5	13.5	13.5	15.5	15.5	14.0	13.0	19.0	19.0
22	23.0	22.0	13.5	13.5	13.5	13.0	15.5	14.0	14.0	14.0	19.0	18.0
23	22.0	22.0	13.5	13.5	13.0	13.0	14.0	13.0	14.0	14.0	18.0	18.0
24	22.0	21.0	---	---	---	---	13.0	11.5	14.0	14.0	18.0	18.0
25	21.5	20.5	---	---	---	---	11.5	11.5	14.5	14.5	18.0	18.0
26	20.5	20.5	---	---	11.0	11.0	11.5	11.5	14.5	14.5	18.5	18.0
27	20.0	19.5	---	---	11.0	11.0	11.5	11.5	15.0	14.5	18.5	18.0
28	19.0	19.0	---	---	11.0	10.5	11.5	11.5	15.0	15.0	18.5	18.0
29	19.0	18.5	---	---	11.5	11.0	11.5	11.5	---	---	19.0	18.0
30	18.5	17.5	---	---	11.5	11.0	11.5	11.5	---	---	19.0	19.0
31	17.0	16.5	---	---	11.0	11.0	11.5	11.5	---	---	19.0	19.0
MONTH	24.5	16.5	---	---	14.0	10.5	15.5	10.0	15.0	10.0	19.0	14.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	19.0	22.0	21.5	25.0	24.0	30.0	28.5	29.5	29.0	28.5	28.0
2	19.0	18.5	23.0	22.0	25.0	24.5	28.5	28.0	30.0	29.0	28.5	28.5
3	18.5	18.5	23.0	22.0	26.0	25.0	28.5	28.0	30.0	30.0	28.5	28.0
4	18.5	18.5	23.0	22.0	26.0	26.0	28.5	28.0	30.0	29.0	29.0	28.5
5	18.5	18.5	23.0	22.0	26.0	26.0	29.0	28.5	30.5	30.0	29.0	28.5
6	19.0	18.5	23.0	22.0	26.0	26.0	29.0	28.5	30.5	30.0	29.5	29.0
7	19.5	19.0	23.0	22.0	26.0	26.0	28.5	28.0	30.5	30.0	29.5	29.0
8	20.0	19.5	23.0	23.0	26.0	25.5	28.5	28.0	30.0	29.5	29.5	29.5
9	20.0	19.5	23.5	23.0	26.0	25.5	28.5	27.0	29.5	29.0	29.5	29.5
10	19.5	18.5	24.0	23.0	26.5	26.0	28.5	27.0	29.5	28.5	29.5	29.0
11	19.0	18.5	24.5	24.0	27.0	26.5	27.0	26.5	29.0	28.5	29.0	28.5
12	19.0	18.5	24.5	24.0	28.5	27.0	28.0	26.5	29.0	28.5	28.5	27.0
13	19.0	18.5	24.5	24.0	29.0	28.0	28.0	27.0	28.5	28.0	27.0	27.0
14	19.5	19.0	24.0	23.5	29.0	28.0	27.0	27.0	28.0	27.0	27.0	26.5
15	19.5	19.0	24.0	23.5	29.5	28.5	28.5	27.0	28.0	27.0	26.5	26.0
16	20.0	19.5	24.0	23.5	29.5	29.0	29.0	28.0	28.5	27.0	26.5	26.5
17	20.5	19.0	24.0	23.5	29.5	29.0	29.5	28.5	28.5	28.0	26.5	26.0
18	20.5	20.0	23.5	23.0	29.0	28.5	29.5	29.0	28.5	28.0	26.5	26.0
19	20.5	20.0	23.0	21.5	29.0	28.5	29.0	28.5	28.5	28.0	26.0	26.0
20	20.5	20.0	21.5	21.0	29.0	28.5	29.5	28.5	28.0	27.0	26.5	26.0
21	20.5	20.0	22.0	21.0	29.0	28.5	29.5	29.0	28.0	27.0	26.5	26.0
22	20.5	20.0	23.5	22.0	29.0	29.0	29.5	29.0	28.0	27.0	26.5	26.0
23	21.0	20.5	24.0	23.0	29.5	29.0	30.0	29.0	27.0	27.0	26.0	26.0
24	21.0	21.0	25.0	24.0	29.5	29.0	30.5	30.0	28.0	27.0	26.5	26.0
25	21.0	21.0	26.0	25.0	29.5	29.0	30.5	30.0	28.5	28.0	27.0	26.5
26	21.0	21.0	27.0	26.0	30.0	29.5	30.5	30.0	28.5	28.0	28.0	27.0
27	21.0	21.0	27.0	26.5	30.5	29.5	30.5	30.0	28.0	28.0	27.0	26.5
28	21.5	21.0	27.0	26.5	30.5	29.5	30.5	30.0	28.5	28.0	27.0	26.5
29	21.5	21.5	26.5	26.0	30.0	29.5	30.0	29.5	28.0	28.0	28.0	26.5
30	22.0	21.5	26.0	25.0	30.0	29.0	29.5	29.0	28.0	28.0	28.0	26.5
31	---	---	25.0	24.0	---	---	29.5	29.0	28.5	28.0	---	---
MONTH	22.0	18.5	27.0	21.0	30.5	24.0	30.5	26.5	30.5	27.0	29.5	26.0
YEAR	30.5	10.0										

09529000 NORTH GILA DRAIN NO. 1 NEAR YUMA, ARIZ.

LOCATION.--Lat 32°45'29", long 114°27'18", in NE¼NW¼ sec.9, T.8 S., R.22 W., Yuma County, 0.1 mi (0.2 km) upstream from outlet to Colorado River, and 6 mi (10 km) northeast of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1973 (partial-record station), October 1973 to current year.

REMARKS.--Unpublished chemical analyses (partial record) for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
02...	0915	5.0	23	10	130	47	310	5.0	274	0	530	250
NOV.												
20...	1110	3.2	20	10	110	42	260	5.2	247	0	490	230
DEC.												
21...	0910	3.6	21	10	110	43	260	5.1	258	0	440	240
JAN.												
21...	0925	2.2	21	20	100	39	240	5.3	243	0	440	230
FEB.												
19...	0930	3.6	21	10	110	44	260	6.2	267	0	500	230
MAR.												
21...	1445	4.1	20	10	100	43	250	6.0	226	0	450	240
APR.												
22...	1000	4.7	20	20	110	41	250	4.5	230	0	450	230
MAY												
20...	1040	7.8	17	10	110	40	210	5.0	229	0	440	190
JUNE												
24...	1410	6.0	22	20	120	47	260	5.4	255	0	520	250
JULY												
22...	0930	5.6	24	40	120	48	270	5.5	283	0	500	240
AUG.												
19...	1000	5.9	23	20	120	45	260	5.1	264	0	490	240
SEP.												
23...	1135	8.9	23	50	120	53	260	6.1	272	--	470	240

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
02...	.7	.76	360	1440	1440	1.96	520	290	5.4	2140	7.9	20.5
NOV.												
20...	.6	.48	300	1250	1280	1.70	450	250	5.3	1940	8.1	14.5
DEC.												
21...	.8	.46	310	1300	1250	1.77	450	240	5.3	2000	8.0	11.5
JAN.												
21...	.7	.28	290	1230	1200	1.67	410	210	5.2	1860	8.2	15.5
FEB.												
19...	.7	.94	330	1330	1310	1.81	460	240	5.3	1980	8.0	14.0
MAR.												
21...	.8	.40	320	1280	1220	1.74	430	240	5.3	1970	8.1	27.0
APR.												
22...	.7	.50	330	1260	1220	1.71	440	250	5.2	1560	8.1	22.0
MAY												
20...	.6	.29	270	1170	1130	1.59	440	250	4.4	1800	8.1	22.0
JUNE												
24...	.8	.22	370	1430	1370	1.94	490	280	5.5	2140	8.2	32.0
JULY												
22...	.8	.29	360	1400	1350	1.90	500	270	5.3	2120	7.9	26.0
AUG.												
19...	.7	.34	350	1370	1320	1.86	490	260	5.1	2060	8.0	26.5
SEP.												
23...	.7	.32	350	1380	1310	1.88	520	290	5.0	2050	--	25.0

09529050 NORTH GILA DRAIN NO. 3 NEAR YUMA, ARIZ.

LOCATION.--Lat 32°44'28", long 114°26'39", in NE¼NE¼ sec.18, T.8 S., R.21 W., Yuma County, 0.2 mi (0.3 km) upstream from outlet to Gila River, and 10 mi (16 km) east of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1973 (partial-record station), October 1973 to current year.

REMARKS.--No flow for many days of most months. Unpublished chemical analyses (partial record) for water years 1965-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
02...	0950	.50	19	70	100	34	170	5.6	226	0	350	140
NOV.												
20...	1145	.30	20	30	98	33	160	5.6	212	0	370	140
DEC.												
21...	1000	.20	21	10	95	33	170	5.3	215	0	370	150
JAN.												
21...	1020	.18	23	30	94	34	170	5.6	212	0	350	150
FEB.												
19...	1110	.00	22	10	97	35	160	6.2	212	0	370	150
MAR.												
21...	1545	.04	23	20	90	37	180	6.7	199	0	360	170
APR.												
22...	1120	.03	22	120	100	36	170	5.2	221	0	350	160
MAY												
20...	0900	.13	22	10	120	47	300	6.5	246	0	480	340
JUNE												
24...	1445	.04	23	100	95	36	180	6.4	194	0	370	150

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
02...	.6	.00	<40	934	931	1.27	390	200	3.7	1420	7.8	21.0
NOV.												
20...	.6	.05	<10	946	932	1.29	380	210	3.6	1440	8.0	14.5
DEC.												
21...	.6	.04	<40	947	952	1.29	370	200	3.6	1460	8.1	11.0
JAN.												
21...	.7	.03	<10	944	932	1.29	370	200	3.6	1440	8.1	15.5
FEB.												
19...	.7	.05	<30	1030	946	1.40	390	<10	3.5	1470	8.1	11.0
MAR.												
21...	.7	.03	<30	988	986	1.34	380	<10	4.0	1520	8.1	20.0
APR.												
22...	.7	.04	<40	995	953	1.35	400	220	3.7	1500	8.0	21.5
MAY												
20...	1.1	.35	<70	1490	1440	2.03	490	290	5.9	2300	7.9	20.0
JUNE												
24...	1.0	.10	<30	1010	980	1.37	390	220	4.0	1510	8.3	37.0

09529160 SOUTH GILA PUMP OUTLET CHANNEL NO. 3 NEAR YUMA, ARIZ.

LOCATION.--Lat 32°43'04", long 114°30'12", in NW¼SE¼ sec.22, T.8 S., R.22 W., Yuma County, at gaging station 0.5 mi (0.8 km) upstream from outlet to Gila River, and 6 mi (10 km) east of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--No flow for many days of most months. Unpublished miscellaneous chemical analyses for water years 1965-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
JUNE										
17...	0440	18	17	322	140	950	12	378	0	640
24...	0430	15	19	320	144	980	13	384	0	650
JULY										
01...	0430	51	21	278	118	840	11	338	0	540
08...	0445	34	19	246	111	670	9.8	362	0	470
15...	0335	23	19	274	118	820	11	348	0	520
22...	0230	23	18	272	117	820	11	348	0	520
29...	0450	27	20	264	120	820	11	354	0	520
AUG.										
05...	0240	26	18	264	117	820	10	354	0	530
19...	0445	31	20	286	113	890	12	428	0	680
26...	0350	31	19	278	133	890	11	438	0	700

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
JUNE										
17...	1750	1.0	4310	4020	5.86	1380	1100	11	6680	28.5
24...	1790	1.0	4430	4100	6.02	1390	1080	11	6800	23.0
JULY										
01...	1530	.9	3630	3510	4.94	1180	903	11	5790	25.5
08...	1250	.9	3150	2960	4.28	1070	773	8.9	5040	28.0
15...	1510	.9	3700	3450	5.03	1170	884	10	5830	22.0
22...	1500	.9	3690	3430	5.02	1160	874	10	5790	20.0
29...	1490	1.0	3670	3420	4.99	1150	860	11	5760	29.0
AUG.										
05...	1470	.8	3670	3410	4.99	1140	850	11	5740	22.0
19...	1460	1.0	3940	3680	5.36	1180	829	11	5990	27.0
26...	1480	.9	4030	3730	5.48	1240	881	11	6090	23.5

09529200 BRUCE CHURCH DRAIN NEAR YUMA, ARIZ.

LOCATION.--Lat 32°43'26", long 114°31'07", in NW¼NE¼ sec.21, T.8 S., R.22 W., Yuma County, 0.2 mi (0.3 km) upstream from outlet to Gila River, and 5 mi (8 km) east of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1973 (partial-record station), October 1973 to current year.

REMARKS.--Unpublished chemical analyses (partial record) for water years 1965-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
02...	1045	.10	29	10	190	71	310	8.7	391	0	650	270
NOV.												
20...	1220	1.0	30	10	190	69	290	9.1	414	0	690	270
DEC.												
21...	1400	.87	30	70	190	70	300	8.2	413	0	670	290
JAN.												
22...	1110	.61	23	10	170	70	290	8.6	384	0	670	280
FEB.												
19...	1130	.60	26	20	190	71	300	9.9	400	0	700	280
MAR.												
21...	1025	1.3	31	20	190	69	290	10	408	0	680	290
APR.												
22...	1215	1.0	28	40	180	70	300	8.0	394	0	660	270
MAY												
20...	1130	1.5	27	20	190	69	270	7.8	397	0	640	260
JUNE												
24...	1515	3.0	31	20	180	66	270	8.6	377	0	630	260
JULY												
22...	1045	1.8	31	30	180	70	270	8.1	392	0	630	260
AUG.												
19...	1145	.90	34	40	180	68	280	7.6	381	0	610	270
SEP.												
23...	1235	1.9	31	40	190	77	260	9.5	384	--	600	270

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.												
02...	.7	.39	400	1730	1720	2.35	770	450	4.9	2450	7.8	22.0
NOV.												
20...	.7	.66	370	1590	1760	2.16	760	420	4.6	2490	7.7	13.0
DEC.												
21...	.7	.70	370	1780	1770	2.42	760	420	4.7	2580	7.7	11.0
JAN.												
22...	.7	.07	380	1750	1700	2.38	710	400	4.7	2410	7.7	10.5
FEB.												
19...	.9	1.0	390	1820	1780	2.48	770	440	4.7	2530	7.7	13.5
MAR.												
21...	.9	.98	400	1790	1760	2.43	760	420	4.6	2590	7.6	21.0
APR.												
22...	.8	.29	420	1760	1710	2.39	740	410	4.8	2520	7.6	21.5
MAY												
20...	.8	.44	370	1740	1660	2.37	760	430	4.3	2470	7.7	18.0
JUNE												
24...	.8	.44	400	1730	1630	2.35	720	410	4.4	2440	8.1	34.0
JULY												
22...	.8	.71	370	1720	1650	2.34	740	420	4.3	2450	7.8	27.0
AUG.												
19...	.7	.53	390	1730	1640	2.35	730	420	4.5	2450	8.0	27.0
SEP.												
23...	.7	.67	380	1790	1630	2.43	790	480	4.0	2490	--	28.5

09529240 SOUTH GILA PUMP OUTLET CHANNEL NO. 2 NEAR YUMA, ARIZ.

LOCATION.--Lat 32°42'31", long 114°31'45", in NW¼SW¼ sec.28, T.8 S., R.22 W., Yuma County, at gaging station 0.6 mi (1.0 km) upstream from outlet to Gila River, and 4 mi (6 km) east of Yuma.

PERIOD OF RECORD.--October 1968 to current year.

REMARKS.--No flow for many days of most months. Unpublished miscellaneous chemical analyses for water years 1965-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
JUNE										
17...	0430	19	17	115	47	420	7.5	294	0	490
24...	0445	43	19	124	49	450	7.1	294	0	450
JULY										
01...	0505	33	22	125	48	455	8.1	296	0	450
08...	0430	33	19	122	50	450	8.4	298	0	450
15...	0355	35	19	126	50	450	8.3	288	0	440
22...	0235	36	17	122	51	445	7.3	288	0	440
29...	0440	38	19	122	50	450	7.8	288	0	440
AUG.										
05...	0245	38	18	127	47	445	8.1	288	0	440
12...	0440	12	18	125	47	445	8.1	286	0	460
19...	0435	36	19	121	48	445	8.3	294	0	450
26...	0400	36	18	123	47	445	8.2	292	0	450
SEP.										
02...	0540	38	19	119	49	445	7.2	296	0	450
09...	0445	39	17	122	49	445	7.9	292	0	450
16...	0415	39	18	121	48	440	7.9	292	0	440
23...	0400	31	18	117	53	470	8.3	298	0	440
30...	0415	31	17	118	52	470	8.3	298	0	440

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
JUNE										
17...	460	1.1	1730	1700	2.35	480	239	8.3	2770	29.0
24...	550	1.1	1840	1800	2.50	510	269	8.7	2980	23.0
JULY										
01...	560	1.1	1860	1820	2.53	510	268	8.8	3010	25.5
08...	560	1.0	1850	[illegible]	2.52	510	266	8.7	3000	28.5
15...	570	1.0	1880	1810	2.56	520	284	8.6	3000	23.0
22...	560	1.0	1820	1790	2.48	515	279	8.5	2960	20.5
29...	565	1.1	1840	1800	2.50	510	274	8.7	2990	29.0
AUG.										
05...	560	1.0	1820	1790	2.48	510	274	8.6	2960	23.5
12...	540	1.0	1800	1790	2.45	505	270	8.6	2910	25.0
19...	550	1.1	1830	1790	2.49	500	259	8.7	2940	28.0
26...	545	1.1	1820	1780	2.48	500	260	8.7	2970	20.0
SEP.										
02...	545	1.0	1780	1780	2.42	500	258	8.7	2960	23.5
09...	545	1.1	1830	1780	2.49	505	266	8.6	2960	29.0
16...	540	1.0	1810	1760	2.46	500	260	8.6	2910	23.0
23...	590	1.0	1900	1850	2.58	510	266	9.1	3100	23.5
30...	590	1.0	1900	1850	2.58	510	266	9.1	3090	25.5

09529300 WELLTON-MOHAWK MAIN OUTLET DRAIN NEAR YUMA, ARIZ.

LOCATION.--Lat 32°44'35", long 114°26'02", in NW¼NE¼ sec.17, T.8 S., R.21 W., Yuma County, at gaging station, 8 mi (13 km) upstream from outlet to Gila River, and 11 mi (18 km) east of Yuma.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
01...	0555	300	23	236	115	980	10	420	0	940	1330
08...	0215	291	23	234	111	980	10	420	0	930	1320
15...	0300	276	23	246	108	1010	10	424	0	960	1340
22...	0530	297	23	250	106	1010	10	418	0	950	1360
29...	0205	294	23	250	111	990	10	426	0	940	1350
NOV.											
05...	0300	278	20	222	111	970	9.7	422	0	940	1280
12...	0550	306	22	250	108	970	9.7	412	0	940	1310
19...	0355	291	22	250	111	980	10	426	0	950	1330
26...	0250	298	23	246	113	980	9.8	430	0	950	1330
DEC.											
03...	0545	284	23	262	106	1010	10	432	0	980	1350
10...	0230	310	22	262	106	1010	9.8	430	0	980	1350
17...	0250	297	24	262	109	1020	10	434	0	990	1360
24...	0215	296	24	254	106	980	10	428	0	960	1310
31...	0300	293	23	252	107	980	10	428	0	950	1320
JAN.											
07...	0310	301	24	246	104	950	10	426	0	930	1260
14...	0240	296	24	242	106	950	9.8	430	0	930	1260
21...	0240	304	23	246	104	950	10	424	0	930	1260
28...	0310	293	25	250	111	980	10	428	0	950	1330
FEB.											
04...	0245	14	23	240	102	1010	11	376	0	1030	1290
11...	0300	269	24	234	121	1000	10	424	0	960	1350
18...	0330	293	25	248	115	1030	10	424	0	970	1390
25...	0445	294	25	242	113	1000	9.9	424	0	960	1340
MAR.											
04...	0300	325	24	232	119	990	10	424	0	960	1330
11...	0330	293	23	256	109	1020	10	428	0	970	1390
18...	0230	300	22	246	111	990	10	426	0	960	1340
25...	0310	304	23	248	110	1000	10	422	0	960	1340
APR.											
01...	0315	314	24	250	108	1000	10	420	0	970	1360
08...	0210	297	23	222	116	960	9.7	420	0	940	1270
15...	0245	288	24	238	106	960	10	426	0	940	1270
22...	0315	294	22	238	106	960	10	426	0	950	1270
29...	0410	284	22	252	100	960	10	432	0	950	1270
MAY											
06...	0240	298	23	234	111	990	10	430	0	960	1300
13...	0230	290	21	244	98	910	9.4	428	0	930	1180
20...	0325	301	23	244	105	960	10	432	0	960	1260
27...	0120	307	22	254	104	990	10	428	0	970	1310
JUNE											
03...	0240	4.2	13	214	101	1050	12	232	0	1070	1360
10...	0345	248	20	246	99	990	10	396	0	960	1300
17...	0030	296	18	252	103	980	10	416	0	970	1300
24...	0305	293	22	250	111	990	10	434	0	970	1340
JULY											
01...	0040	304	23	244	105	960	9.9	436	0	960	1270
08...	0250	300	22	250	99	950	9.8	428	0	960	1250
15...	0205	303	22	244	100	940	9.8	430	0	960	1230
22...	0320	298	21	242	101	950	9.7	424	0	960	1240
29...	0250	304	23	238	101	940	9.8	424	0	950	1230
AUG.											
05...	0435	300	21	230	108	958	9.7	404	0	960	1240
12...	0325	302	22	242	101	940	9.6	434	0	960	1220
19...	0240	295	21	242	101	940	10	432	0	960	1220
26...	0305	299	21	238	101	910	9.6	438	0	930	1200
SEP.											
02...	0430	291	21	238	101	910	9.4	434	0	940	1180
09...	0255	288	20	244	93	940	9.4	420	0	960	1210
16...	0030	264	20	238	94	940	9.5	428	0	950	1210
23...	0325	268	21	232	98	940	9.5	422	0	960	1210
30...	0120	298	19	218	96	930	9.8	398	0	950	1180

09529300 WELLTON-MOHAWK MAIN OUTLET DRAIN NEAR YUMA, ARIZ.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--No flow Feb. 6, 7. Unpublished chemical analyses (continuing record) for water years 1961-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.										
01...	1.8	3900	3850	5.30	1060	716	13	6030	8.0	23.0
08...	1.6	3900	3820	5.30	1040	696	13	5980	8.0	21.0
15...	1.7	4000	3910	5.44	1060	712	14	6150	8.1	22.0
22...	1.6	4020	3920	5.47	1060	717	13	6150	8.0	20.0
29...	1.6	4000	3890	5.44	1080	730	13	6100	8.1	20.0
NOV.										
05...	1.6	3790	3770	5.15	1010	664	13	5940	8.0	18.5
12...	1.6	3880	3820	5.28	1070	732	13	6000	8.1	--
19...	1.6	3950	3870	5.37	1080	730	13	6130	8.0	19.0
26...	1.6	3980	3870	5.41	1080	728	13	6100	8.0	15.0
DEC.										
03...	1.8	4020	3960	5.47	1090	736	13	6180	8.0	15.0
10...	1.8	4090	3960	5.56	1090	738	13	6170	8.1	13.0
17...	1.7	4100	3990	5.58	1100	744	13	6210	8.0	16.5
24...	1.7	3960	3860	5.39	1070	719	13	6080	8.0	19.0
31...	1.6	4030	3860	5.48	1070	719	13	6080	8.0	15.5
JAN.										
07...	1.7	3880	3740	5.28	1040	690	13	5880	8.0	18.0
14...	1.7	3960	3740	5.39	1040	688	13	5880	8.0	18.0
21...	1.7	3830	3740	5.21	1040	692	13	5890	8.0	15.5
28...	1.7	4010	3870	5.45	1080	729	13	6100	8.0	15.5
FEB.										
04...	1.5	3930	3900	5.34	1020	712	14	6080	8.1	14.0
11...	1.8	3960	3910	5.39	1080	732	13	6170	8.1	10.5
18...	1.8	4040	4000	5.49	1090	742	14	6330	8.0	18.5
25...	1.8	4000	3900	5.44	1070	722	13	6170	7.9	17.5
MAR.										
04...	1.7	4050	3880	5.51	1070	722	13	6130	8.0	14.0
11...	3.8	4190	4000	5.70	1090	739	13	6300	8.0	18.5
18...	1.9	3990	3890	5.43	1070	720	13	6140	8.1	20.5
25...	1.9	4020	3900	5.47	1070	724	13	6170	8.0	18.5
APR.										
01...	1.9	4010	3930	5.45	1070	726	13	6200	7.9	19.0
08...	1.9	3850	3750	5.24	1030	686	13	5930	8.0	19.5
15...	1.9	3820	3760	5.20	1030	680	13	5930	8.0	19.0
22...	1.9	3850	3770	5.24	1030	680	13	5930	7.9	22.0
29...	1.9	3870	3780	5.26	1040	689	13	5940	8.0	23.0
MAY										
06...	1.9	3840	3840	5.22	1040	688	13	6080	7.8	22.0
13...	1.9	3720	3610	5.06	1010	659	12	5670	7.9	24.0
20...	1.9	3910	3780	5.32	1040	686	13	5960	8.0	21.5
27...	1.9	4000	3880	5.44	1060	709	13	6100	7.9	26.0
JUNE										
03...	1.7	4100	3940	5.58	950	760	15	6210	--	22.0
10...	1.9	3850	3820	5.24	1020	696	13	6020	--	24.0
17...	1.9	3900	3840	5.30	1050	709	13	6060	--	28.0
24...	1.9	3990	3910	5.43	1080	724	13	6160	--	25.5
JULY										
01...	1.9	3850	3790	5.24	1040	682	13	5950	--	27.0
08...	1.9	3780	3760	5.14	1030	679	13	5890	--	28.5
15...	1.9	3810	3720	5.18	1020	668	13	5820	--	25.5
22...	1.9	3830	3740	5.21	1020	672	13	5880	--	26.0
29...	1.9	3890	3710	5.29	1010	662	13	5830	--	29.0
AUG.										
05...	1.8	3840	3720	5.22	1020	688	13	5880	--	26.0
12...	1.7	3820	3710	5.20	1020	664	13	5830	--	25.5
19...	1.9	3830	3710	5.21	1020	666	13	5830	--	27.0
26...	1.8	3820	3630	5.20	1010	651	12	5710	--	24.5
SEP.										
02...	1.9	3740	3620	5.09	1010	654	12	5700	--	25.5
09...	2.5	3780	3690	5.14	990	646	13	5820	--	27.0
16...	1.7	3770	3680	5.13	980	629	13	5780	--	24.5
23...	2.5	3770	3680	5.13	980	634	13	5790	--	24.5
30...	1.9	3770	3600	5.13	940	614	13	5690	--	25.0

09529360 SOUTH GILA PUMP OULET CHANNEL NO. 1 NEAR YUMA, ARIZ.

LOCATION.--Lat 32°42'24", long 114°33'19", in SW¼NE¼ sec.30, T.8 S., R.22 W., Yuma County, at gaging station, 0.2 mi (0.3 km) upstream from outlet to Gila River, and 4 mi (6 km) east of Yuma.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	0945	39	26	0	150	58	490	8.0	291	0	480	650
NOV.												
07...	0800	49	19	--	145	59	475	8.1	292	0	480	650
12...	0945	43	18	--	133	54	455	7.9	284	0	480	580
19...	0320	50	17	--	142	61	470	7.7	294	0	480	640
26...	0445	49	20	--	145	58	470	7.6	294	0	480	640
DEC.												
03...	0515	46	18	--	146	57	470	7.9	294	0	480	640
10...	0210	45	16	--	145	58	470	7.1	292	0	480	630
17...	0310	45	20	--	143	59	470	8.2	294	0	480	630
24...	0345	45	19	--	145	58	470	8.2	292	0	480	635
31...	0230	52	21	--	148	56	470	8.3	296	0	480	630
JAN.												
07...	0500	37	21	--	131	52	440	8.2	288	0	470	550
14...	0540	37	19	--	120	54	435	7.9	288	0	470	540
21...	0420	11	17	--	94	40	420	7.5	296	0	480	410
28...	0100	46	20	--	143	59	470	8.4	292	0	480	635
FEB.												
04...	0420	47	21	--	147	59	460	8.5	292	0	470	625
11...	0430	54	21	--	141	60	480	8.0	294	0	490	635
18...	0400	49	21	--	143	64	475	8.9	294	0	490	640
25...	0530	49	19	--	148	58	470	8.0	290	0	480	635
MAR.												
04...	0430	54	20	--	139	62	470	8.3	292	0	480	630
11...	0515	49	18	--	147	57	470	8.3	294	0	480	630
18...	0500	47	17	--	149	58	460	8.2	300	0	470	625
25...	0500	47	18	--	143	62	460	8.1	292	0	470	625
APR.												
01...	0515	49	18	--	149	60	490	8.5	294	0	500	660
08...	0535	48	19	--	146	57	460	8.2	292	0	470	625
15...	0510	49	18	--	149	55	460	8.4	292	0	470	625
22...	0540	50	19	--	147	57	460	8.0	296	0	470	625
29...	0330	46	16	--	149	55	460	8.4	292	0	470	625
MAY												
06...	0430	46	17	--	146	57	460	8.2	292	0	470	625
13...	0535	47	17	--	147	55	460	8.2	294	0	460	625
20...	0255	51	17	--	147	58	460	8.5	292	0	460	630
27...	0410	45	17	--	144	60	460	8.8	294	0	470	625
JUNE												
03...	0525	46	17	--	145	58	460	8.3	292	0	460	630
10...	0320	46	16	--	144	60	460	8.5	294	0	470	630
17...	0430	47	16	--	143	55	455	8.3	292	0	460	625
24...	0505	42	18	--	147	62	480	8.4	296	0	490	655
JULY												
01...	0520	24	19	--	147	60	480	8.8	296	0	490	645
08...	0415	50	18	--	147	58	480	8.5	296	0	490	640
15...	0410	46	16	--	144	60	480	8.7	296	0	490	635
22...	0245	42	17	--	142	60	470	7.7	298	0	480	635
29...	0430	39	19	--	142	60	465	7.8	300	0	470	625
AUG.												
05...	0255	38	19	--	147	57	450	8.7	296	0	460	610
12...	0400	18	19	--	134	41	440	7.7	294	0	470	520
19...	0425	38	19	--	128	55	445	8.3	304	0	500	530
26...	0340	35	18	--	137	47	445	8.0	286	0	500	535
SEP.												
02...	0310	39	18	--	132	51	445	7.2	284	0	500	535
09...	0430	39	20	--	133	51	440	8.2	286	0	500	535
16...	0430	41	16	--	134	50	440	8.0	288	0	490	535
23...	0430	30	16	--	116	51	435	8.3	292	0	470	520
30...	0400	30	15	--	117	47	425	8.0	284	0	460	495

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09529360 SOUTH GILA PUMP OUTLET CHANNEL NO. 1 NEAR YUMA, ARIZ.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1966-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CaCO3) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.												
01...	.9	.70	670	2080	2010	2.83	610	370	8.6	3260	7.9	23.5
NOV.												
07...	.8	--	--	2020	1980	2.75	605	366	8.4	3260	7.9	19.0
12...	.9	--	--	1930	1870	2.62	595	362	8.4	3120	7.9	19.5
19...	.9	--	--	2010	1970	2.73	605	364	8.3	3250	7.9	21.5
27...	.8	--	--	1990	1970	2.71	600	359	8.3	3250	7.8	15.0
DEC.												
03...	.9	--	--	1990	1970	2.71	600	359	8.4	3240	7.9	18.0
10...	.9	--	--	2060	1960	2.70	600	360	8.3	3240	7.9	14.0
17...	.9	--	--	1980	1960	2.69	600	359	8.4	3230	7.8	20.0
24...	.8	--	--	1970	1960	2.68	600	360	8.3	3240	7.7	21.0
31...	.8	--	--	2030	1980	2.76	600	358	8.3	3230	7.8	15.5
JAN.												
07...	1.0	--	--	1990	1820	2.71	590	364	8.2	3000	7.8	20.0
14...	1.0	--	--	1850	1800	2.52	535	380	8.2	2980	7.8	20.5
21...	1.2	--	--	1840	1820	2.63	400	156	9.1	2660	7.9	15.0
28...	.9	--	--	2000	1980	2.72	600	360	8.4	3240	7.9	13.5
FEB.												
04...	.9	--	--	1950	1940	2.65	610	370	8.1	3210	7.8	22.0
11...	.9	--	--	2000	1980	2.72	600	359	8.5	3250	7.8	18.0
18...	.9	--	--	2010	1990	2.73	620	374	8.3	3270	7.8	19.5
25...	1.0	--	--	2000	1960	2.72	610	372	8.3	3250	7.7	19.5
MAR.												
04...	.9	--	--	2060	1980	2.80	600	366	8.3	3240	7.7	15.5
11...	1.0	--	--	1990	1960	2.71	600	359	8.3	3240	7.8	19.5
18...	1.0	--	--	1980	1940	2.69	610	364	8.1	3220	7.9	20.0
25...	1.1	--	--	1980	1930	2.67	610	370	8.1	3210	7.8	19.0
APR.												
01...	1.0	--	--	2030	2030	2.76	620	379	8.6	3340	7.7	20.0
08...	1.1	--	--	1970	1930	2.68	600	360	8.2	3210	7.8	20.0
15...	1.1	--	--	1980	1930	2.69	600	360	8.2	3210	7.8	19.5
22...	1.2	--	--	1990	1940	2.71	600	358	8.2	3210	7.7	24.5
29...	1.1	--	--	1990	1930	2.71	600	360	8.2	3210	7.8	22.0
MAY												
06...	1.1	--	--	1980	1930	2.69	600	360	8.2	3220	7.7	--
13...	1.1	--	--	1970	1920	2.68	595	354	8.2	3210	7.7	22.0
20...	1.1	--	--	1980	1930	2.69	605	366	8.1	3210	7.8	22.0
27...	1.0	--	--	1990	1930	2.71	605	364	8.1	3220	7.7	25.5
JUNE												
03...	1.0	--	--	1950	1930	2.65	600	366	8.2	3210	--	23.0
10...	1.0	--	--	1990	1940	2.71	605	364	8.1	3220	--	25.0
17...	1.1	--	--	1980	1910	2.69	595	356	8.1	3200	--	24.0
24...	1.0	--	--	2080	2010	2.83	620	378	8.4	3320	--	23.5
JULY												
01...	1.1	--	--	2030	2000	2.76	615	372	8.4	3280	--	25.5
08...	1.0	--	--	2010	1990	2.73	605	362	8.5	3260	--	28.0
15...	1.1	--	--	2020	1980	2.75	605	362	8.5	3260	--	23.0
22...	.9	--	--	2000	1960	2.72	600	356	8.3	3240	--	20.5
29...	1.1	--	--	2030	1940	2.76	600	354	8.3	3220	--	28.5
AUG.												
05...	1.0	--	--	1970	1900	2.68	600	358	8.0	3180	--	23.0
12...	.9	--	--	1810	1780	2.46	505	284	8.5	2940	--	23.0
19...	1.1	--	--	1880	1840	2.56	545	298	8.3	2980	--	28.0
26...	1.1	--	--	1890	1830	2.57	535	300	8.4	2990	--	20.5
SEPT.												
02...	1.1	--	--	1850	1830	2.52	540	307	8.3	2990	--	24.0
09...	.9	--	--	1860	1830	2.53	540	306	8.2	2990	--	29.0
16...	1.0	--	--	1900	1820	2.58	540	304	8.2	2980	--	23.0
23...	1.1	--	--	1800	1760	2.45	500	280	8.5	2920	--	23.5
30...	1.0	--	--	1800	1710	2.45	485	252	8.4	2830	--	25.5

09529440 SOUTH GILA PUMP OUTLET CHANNEL NO. 4 NEAR YUMA, ARIZ.

LOCATION.--Lat 32°42'46", long 114°35'50", in NW¼NW¼ sec.26, T.8 S., R.23 W., Yuma County, at gaging station, 1.5 mi (2.4 km) upstream from outlet to Colorado River, and 1.5 mi (2.4 km) east of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--No flow for many days of most months. Unpublished miscellaneous chemical analyses for water years 1966-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	0115	20	30	0	350	150	910	9.8	388	0	520	1800
NOV.												
05...	0545	8.8	19	--	230	99	660	8.0	300	0	770	980
19...	0200	9.0	20	--	244	90	660	7.9	300	0	780	980
26...	0510	26	20	--	324	134	820	9.3	372	0	610	1560
DEC.												
03...	0430	15	20	--	262	104	720	8.5	346	0	610	1230
10...	0150	16	19	--	262	104	720	8.0	352	0	610	1230
17...	0445	25	21	--	322	135	830	9.6	372	0	620	1570
24...	0420	26	20	--	330	130	830	9.6	370	0	620	1570
31...	0210	25	20	--	332	129	830	9.4	376	0	620	1570
FEB.												
04...	0400	16	21	--	246	104	680	8.2	340	0	580	1160
11...	0430	14	23	--	250	111	700	8.4	346	0	600	1220
18...	0530	23	22	--	318	138	825	9.6	372	0	620	1560
25...	0600	23	24	--	324	134	825	9.4	372	0	620	1560
MAR.												
04...	0430	23	21	--	326	133	825	10	376	0	620	1560
11...	0500	22	20	--	320	137	820	9.4	376	0	610	1560
18...	0520	22	19	--	322	135	825	9.6	378	0	610	1560
25...	0430	22	20	--	316	139	820	9.4	374	0	600	1560
APR.												
01...	0445	23	21	--	320	134	820	9.6	372	0	600	1560
08...	0510	23	20	--	322	133	820	9.2	376	0	600	1560
15...	0435	23	21	--	314	135	815	9.8	376	0	600	1550
22...	0515	23	20	--	314	133	815	10	376	0	600	1550
29...	0340	26	18	--	286	128	770	10	378	0	590	1420
JUNE												
03...	0455	23	19	--	276	117	765	8.0	364	0	610	1340

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.												
01...	.4	.06	750	4170	3960	5.67	1500	1200	10	6640	7.5	23.0
NOV.												
05...	.8	--	--	2980	2920	4.05	980	734	9.2	4680	7.7	19.0
19...	.9	--	--	3040	2930	4.13	980	734	9.2	4690	7.7	22.0
26...	.7	--	--	3800	3660	5.17	1360	1055	9.7	6060	7.8	18.0
DEC.												
03...	.9	--	--	3260	3130	4.43	1080	796	9.5	5170	7.6	--
10...	.8	--	--	3310	3130	4.50	1080	792	9.5	5180	7.7	14.5
17...	.6	--	--	3910	3690	5.32	1360	1060	9.8	6110	7.6	20.0
24...	.7	--	--	3990	3700	5.43	1360	1060	9.8	6120	7.6	23.0
31...	.7	--	--	3890	3700	5.29	1360	1050	9.8	6110	7.7	15.0
FEB.												
04...	.7	--	--	3000	2970	4.08	1040	761	9.2	4960	7.7	23.0
11...	.8	--	--	3110	3090	4.23	1080	796	9.3	5080	7.8	11.0
18...	.8	--	--	3750	3680	5.10	1360	1060	9.7	6100	7.6	20.0
25...	.8	--	--	3800	3680	5.17	1360	1060	9.7	6100	7.5	23.0
MAR.												
04...	.7	--	--	3930	3680	5.34	1360	1050	9.7	6100	7.6	15.5
11...	.9	--	--	3920	3670	5.33	1360	1050	9.7	6090	7.6	20.5
18...	.9	--	--	3830	3670	5.21	1360	1050	9.7	6100	7.7	21.0
25...	.8	--	--	3830	3650	5.21	1360	1050	9.7	6070	7.6	19.5
APR.												
01...	.9	--	--	3820	3650	5.20	1350	1040	9.7	6050	7.6	20.5
08...	.8	--	--	3770	3650	5.13	1350	1040	9.7	6050	7.6	22.0
15...	.9	--	--	3820	3630	5.20	1340	1030	9.7	6030	7.6	19.5
22...	.8	--	--	3800	3630	5.17	1330	1020	9.7	6000	7.5	24.0
29...	.9	--	--	3500	3410	4.76	1240	930	9.5	5720	7.6	24.0
JUNE												
03...	.8	--	--	3430	3320	4.66	1170	872	9.7	5490	--	23.5

09530000 RESERVATION MAIN DRAIN NO. 4 AT YUMA, ARIZ.

LOCATION.--Lat 32°44'09", long 114°37'16", in NW¼SE¼ sec.26, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, at gaging station, at railroad culvert, 0.2 mi (0.3 km) upstream from crossing of U.S. Highway 80, and 0.7 mi (1.1 km) north of Yuma.

PERIOD OF RECORD.--October 1968 to current year.

REMARKS.--Unpublished miscellaneous chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
02...	1110	58	23	0	150	49	230	5.8	283	0	490	250
NOV.												
26...	1120	51	22	10	170	51	240	6.0	286	0	540	260
DEC.												
20...	0950	47	22	10	160	49	230	5.9	285	0	530	260
JAN.												
22...	1040	44	23	20	160	50	230	5.8	284	0	520	260
FEB.												
19...	1040	56	21	20	150	47	220	6.4	274	0	480	250
MAR.												
21...	0925	53	23	10	160	49	230	6.5	281	0	500	260
APR.												
22...	0945	50	22	30	160	48	230	5.0	284	0	510	250
MAY												
20...	1050	58	21	20	160	49	220	5.6	279	0	500	240
JUNE												
24...	1025	57	21	10	140	48	210	5.4	270	0	470	220
JULY												
22...	1010	54	23	20	160	51	220	5.7	282	0	510	250
AUG.												
19...	1125	56	25	40	160	48	220	5.3	282	0	490	240
SEP.												
24...	0830	60	22	20	140	46	200	6.0	267	--	450	230

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.												
02...	.4	.13	270	1410	1340	1.82	580	340	4.2	1880	7.8	23.0
NOV.												
26...	.4	.27	250	1410	1430	1.92	630	400	4.1	2110	7.8	17.0
DEC.												
20...	.5	.27	250	1440	1400	1.96	600	370	4.1	2150	7.8	16.0
JAN.												
22...	.4	.15	260	1400	1390	1.90	610	370	4.1	2090	7.9	13.0
FEB.												
19...	.5	.21	250	1310	1310	1.78	570	340	4.0	2000	7.8	17.0
MAR.												
21...	.6	.53	260	1390	1370	1.89	600	370	4.1	2120	7.7	--
APR.												
22...	.5	.20	280	1380	1370	1.88	600	360	4.1	2080	7.8	20.0
MAY												
20...	.5	.21	260	1310	1330	1.78	600	370	3.9	2080	7.9	20.0
JUNE												
24...	.6	.15	270	1350	1250	1.84	550	330	3.9	2030	8.0	26.0
JULY												
22...	.4	.57	270	1370	1360	1.86	610	380	3.9	2070	7.8	26.0
AUG.												
19...	.4	.23	270	1360	1330	1.85	600	370	3.9	2040	7.9	27.0
SEP.												
24...	.4	.20	250	1270	1230	1.73	540	320	3.8	1980	--	23.0

09530200 YUMA MESA OUTLET DRAIN AT YUMA, ARIZ.

LOCATION.--Lat 32°43'48", long 114°39'27", in SE¼SW¼ sec.28, T.16 S., R.22 E., San Bernardino meridian, in Arizona, Yuma County, at gaging station, 0.3 mi (0.5 km) from outlet to Colorado River, and 0.5 mi (0.8 km) west of Joe Henry Memorial Park in Yuma, Ariz.

PERIOD OF RECORD.--Chemical analyses: July 1972 to current year.

REMARKS.--No flow Jan. 8-14, Aug. 6.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	0720	81	26	0	98	33	330	5.1	241	0	410	340
NOV.												
05...	0745	81	27	20	100	33	330	5.5	240	0	350	350
DEC.												
03...	0745	90	26	10	100	32	320	5.1	242	0	370	350
JAN.												
07...	0750	76	26	0	100	32	320	5.1	247	0	370	340
FEB.												
04...	0750	82	27	10	100	32	310	5.5	239	0	380	360
MAR.												
04...	0900	92	26	40	100	32	320	5.9	242	0	360	350
APR.												
01...	1320	--	25	10	100	32	320	6.0	240	0	400	320
MAY												
06...	0755	82	26	10	100	33	310	5.1	243	0	410	340
JUNE												
04...	0755	77	26	170	100	32	320	5.0	241	0	380	340
JULY												
01...	0740	75	26	20	100	33	320	4.8	242	0	380	340
AUG.												
05...	0945	12	16	10	100	31	320	6.8	246	--	400	330
SEP.												
03...	0740	89	26	50	100	38	320	6.0	242	--	360	350

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.												
01...	.6	.72	480	1330	1370	1.81	380	180	7.4	2160	7.8	--
NOV.												
05...	.5	.85	430	1340	1320	1.82	390	190	7.3	2160	7.9	25.0
DEC.												
03...	.6	.79	470	1360	1330	1.85	380	180	7.1	2180	7.8	25.0
JAN.												
07...	.8	1.0	500	1430	1320	1.94	380	180	7.1	2200	7.8	25.5
FEB.												
04...	.6	.86	470	1340	1340	1.82	380	190	6.9	2190	7.7	25.5
MAR.												
04...	.8	.75	490	1380	1320	1.88	380	180	7.1	2200	7.6	25.5
APR.												
01...	.8	.68	500	1360	1330	1.81	380	180	7.1	2210	7.7	25.5
MAY												
06...	1.2	.78	490	1360	1350	1.85	390	190	6.9	2220	7.7	25.0
JUNE												
04...	.6	.79	470	1340	1330	1.82	380	180	7.1	2170	7.9	26.0
JULY												
01...	.7	.78	490	1370	1330	1.86	390	190	7.1	2210	7.7	25.5
AUG.												
05...	.8	.01	520	1400	1330	1.90	380	180	7.2	2220	7.9	26.0
SEP.												
03...	.8	.96	490	1370	1320	1.86	410	210	6.9	2210	--	--

09530500 DRAIN 8-B NEAR YUMA, ARIZ.

LOCATION.--Lat 32°44'39", long 114°41'45", in NE¼NW¼ sec.30, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, 0.5 mi (0.8 km) upstream from outlet to Colorado River, and 4 mi (6 km) west of Yuma.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1973 (partial-record station), October 1973 to current year.

REMARKS.--Unpublished chemical analyses (partial record) for water years 1962-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
02...	1130	3.0	22	20	86	36	200	4.4	207	0	420	160
NOV.												
05...	0920	3.9	22	10	110	40	210	5.0	237	0	450	180
DEC.												
04...	1030	2.1	21	20	100	34	190	4.6	224	0	400	160
JAN.												
22...	0900	1.6	21	20	97	34	190	4.7	216	0	420	160
FEB.												
19...	1345	1.3	21	10	97	33	190	5.4	210	0	420	160
MAR.												
21...	1115	1.9	21	20	100	34	200	5.4	213	0	400	170
APR.												
22...	0955	1.6	21	30	100	33	190	4.1	221	0	400	150
MAY												
20...	0855	1.7	22	10	100	34	180	4.2	217	0	390	150
JUNE												
24...	1135	1.8	23	120	97	33	190	4.6	203	0	410	150
JULY												
22...	1325	1.9	24	50	101	35	190	7.3	214	0	360	180
AUG.												
19...	0915	2.9	21	20	100	40	210	4.4	234	0	420	170
SEP.												
24...	0820	2.0	23	20	97	35	190	5.0	228	--	390	160

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.												
02...	.5	.01	230	1070	1030	1.46	350	180	4.6	1610	8.2	25.0
NOV.												
05...	.4	.19	230	1170	1140	1.59	440	250	4.4	1750	7.9	18.0
DEC.												
04...	.6	.10	220	1050	1020	1.43	390	210	4.2	1620	7.9	14.5
JAN.												
22...	.4	.05	220	1030	1030	1.40	380	210	4.2	1570	7.9	12.5
FEB.												
19...	.4	.06	210	1030	1030	1.40	380	210	4.3	1560	8.1	23.0
MAR.												
21...	.6	.13	220	1060	1040	1.44	390	220	4.4	1620	7.2	--
APR.												
22...	.5	.05	230	1030	1010	1.40	390	200	4.2	1560	7.9	19.5
MAY												
20...	.5	.06	210	1010	988	1.37	390	210	4.0	1540	7.9	20.0
JUNE												
24...	.6	.06	220	1020	1010	1.39	380	210	4.3	1550	8.4	31.0
JULY												
22...	.5	.77	230	1060	1010	1.44	390	220	4.2	1633	7.6	31.0
AUG.												
19...	.4	.14	250	1120	1090	1.52	410	220	4.5	1680	7.8	24.0
SEP.												
24...	.5	.15	230	1090	1020	1.48	390	200	4.2	1640	--	22.0

09531700 MAIN OUTLET DRAIN EXTENSION NEAR MORELOS DAM, ARIZ.

LOCATION.--Lat 32°43'43", long 114°42'24", in NW¼ sec.36, T.16 S., R.21 E., San Bernardino meridian, Yuma County, at gaging station at gate structure dividing M.O.D.E. 2 and M.O.D.E. 3, and 2 mi (3 km) northeast of Morelos Dam.

PERIOD OF RECORD.--Chemical analyses: August 1969 to September 1974 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT.								
18...	0950	293	28	10	220	100	980	10
NOV.								
14...	1030	307	28	10	240	100	970	9.8
DEC.								
19...	1025	293	29	0	250	110	960	11
JAN.								
18...	1100	298	29	10	240	99	960	9.9
FEB.								
13...	1050	297	30	10	250	98	1000	10
MAR.								
27...	0940	307	28	20	230	100	1000	11

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.									
18...	349	0	860	1300	1.3	.65	1900	3750	3680
NOV.									
14...	365	0	890	1300	1.0	2.2	1700	3730	3730
DEC.									
19...	379	0	950	1300	2.3	2.4	1800	3910	3810
JAN.									
18...	378	0	910	1300	1.8	2.4	1700	3690	3750
FEB.									
13...	367	--	950	1400	2.3	2.4	1800	3980	3930
MAR.									
27...	250	--	1100	1400	3.0	2.2	1900	4000	4010

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
OCT.								
18...	5.10	960	670	14	6060	7.8	22.0	--
NOV.								
14...	5.07	1000	710	13	5350	7.8	18.5	--
DEC.								
19...	5.32	1100	770	13	5960	7.8	16.0	9.7
JAN.								
18...	5.02	1000	700	13	5390	7.8	19.0	9.3
FEB.								
13...	5.30	1000	730	14	6060	8.0	17.5	9.6
MAR.								
27...	5.44	990	780	14	6230	7.8	20.5	9.4

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

09531700 MAIN OUTLET DRAIN EXTENSION NEAR MORELOS DAM, ARIZ.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DIELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
OCT. 18...	0950	293	.00	.0	.00	.00	.00	.00	.00	.00	.00
NOV. 14...	1030	307	.00	.0	.00	.00	.00	.00	.00	.00	.00
DEC. 19...	1025	293	.00	.0	.00	.00	.00	.00	.00	.00	.00
JAN. 18...	1100	298	.00	.0	.00	.00	.00	.00	.00	.00	.00
FEB. 13...	1050	297	.00	.0	.00	.00	.00	.00	.00	.00	.00
MAR. 27...	0940	307	.00	.0	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	TOXAPHENE (UG/L)	DIAZINON (UG/L)	MALATHION (UG/L)	PARATHION (UG/L)	METHYL PARATHION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	PCB (UG/L)	TEMPERATURE (DEG C)
OCT. 18...	.00	0	.00	.00	.00	.00	.00	.00	.00	.0	22.0
NOV. 14...	.00	0	.00	.00	.00	.00	.00	.00	.00	.0	18.5
DEC. 19...	.00	0	.00	.00	.00	.00	.00	.00	.03	.0	14.0
JAN. 18...	.00	0	.00	.00	.00	.00	.00	.00	.01	.0	19.0
FEB. 13...	.00	0	.00	.00	.00	.00	.00	.00	.02	.0	17.5
MAR. 27...	.00	0	.00	.00	.00	.00	.00	.00	.02	.0	20.5

09534000 MAIN DRAIN AT SOUTHERLY INTERNATIONAL BOUNDARY, NEAR SAN LUIS, ARIZ.
(Formerly published as Main drain at San Luis, Ariz.)

LOCATION.--Lat 32°29'17", long 114°47'16", in SE¼NE¼ sec.11, T.11 S., R.25 W., Yuma County, at gaging station at pumping plant, 0.1 mi (0.2 km) upstream from international boundary, and 0.4 mi (0.6 km) west of San Luis.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	0910	160	22	0	150	53	320	6.1	273	0	510	350
25...	0900	150	18	--	152	54	325	7.8	286	0	530	370
NOV.												
05...	1000	158	21	20	140	49	310	6.6	270	0	460	360
19...	0930	161	23	40	160	54	330	7.0	292	0	530	400
DEC.												
03...	0935	160	23	0	150	48	330	6.5	281	0	500	400
17...	1025	160	20	0	140	46	290	6.9	255	0	470	360
JAN.												
07...	0900	142	22	20	140	49	320	6.4	279	0	490	390
21...	0900	133	23	20	150	51	340	6.3	284	0	530	390
FEB.												
05...	1020	130	23	10	150	51	330	6.6	284	0	530	400
19...	0920	145	22	20	140	52	320	7.2	282	0	510	390
MAR.												
05...	0940	130	22	20	150	50	340	6.9	279	0	510	400
19...	0915	145	22	10	140	51	330	6.6	278	0	510	390
APR.												
02...	0940	132	22	20	150	52	340	6.3	282	0	510	390
16...	0915	130	24	20	150	51	350	5.8	286	0	540	380
MAY												
07...	0945	161	22	20	150	53	320	6.8	280	0	530	380
21...	0925	145	21	50	150	55	340	6.4	286	0	500	400
JUNE												
04...	0940	142	23	20	150	55	320	6.0	283	0	490	370
18...	0900	150	23	0	150	54	320	5.9	282	0	470	380
JULY												
02...	0915	151	22	10	140	49	320	7.4	275	0	480	370
16...	0955	56	25	10	150	57	340	6.0	286	0	530	410
AUG.												
06...	0940	135	23	30	150	52	320	7.6	280	--	520	390
20...	0900	130	23	20	150	51	300	7.6	278	0	480	370
SEP.												
03...	0915	140	24	20	150	50	350	6.5	298	--	480	410
17...	0840	140	23	20	120	56	340	8.4	285	--	480	390

09534000 MAIN DRAIN AT SOUTHERLY INTERNATIONAL BOUNDARY NEAR SAN LUIS, ARIZ.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

REMARKS.--Unpublished chemical analyses (continuing record) from October 1961 to September 1968 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
01...	.5	.49	380	1660	1550	2.26	590	370	5.7	2390	8.1	26.0
25...	.7	--	--	1630	1600	2.22	600	366	5.8	2480	8.1	--
NOV.												
05...	.3	.52	360	1510	1480	2.05	550	330	5.7	2360	8.1	18.5
19...	.4	.60	310	1650	1650	2.24	620	380	5.8	2550	8.2	15.0
DEC.												
03...	.4	.57	410	1620	1600	2.20	570	340	6.0	2580	8.0	14.0
17...	.5	.53	320	1470	1460	2.00	540	330	5.4	2270	8.1	15.5
JAN.												
07...	.6	.60	390	1680	1560	2.28	550	320	5.9	2480	8.2	15.5
21...	.6	.61	440	1650	1630	2.24	580	350	6.1	2530	8.1	18.0
FEB.												
05...	.5	.91	430	1630	1640	2.22	580	350	5.9	2530	8.0	17.0
19...	.6	.75	410	1600	1580	2.18	560	330	5.9	2500	8.0	17.0
MAR.												
05...	.5	.65	420	1650	1620	2.24	580	350	6.1	2510	8.0	16.0
19...	.5	.69	410	1620	1590	2.20	560	330	6.1	2490	8.0	21.5
APR.												
02...	.6	.74	410	1660	1610	2.26	590	360	6.1	2550	8.0	19.5
16...	.6	.73	450	1660	1650	2.26	580	350	6.3	2530	8.0	21.0
MAY												
07...	.6	.75	400	1680	1600	2.28	590	360	5.7	2550	8.0	22.5
21...	.5	.65	440	1750	1620	2.38	600	370	6.0	2610	7.9	21.0
JUNE												
04...	.5	.54	430	1690	1560	2.30	600	370	5.7	2540	8.0	23.0
18...	.5	.62	420	1730	1550	2.35	600	370	5.7	2540	8.0	25.5
JULY												
02...	.5	.41	420	1640	1530	2.23	550	330	5.9	2460	8.0	26.5
16...	.5	.63	430	1710	1660	2.26	610	370	6.0	2580	8.0	--
AUG.												
06...	.5	.56	420	1700	1600	2.31	590	360	5.7	2540	--	29.0
20...	.5	.55	380	1590	1520	2.16	580	360	5.4	2430	7.9	28.0
SEP.												
03...	.5	.45	430	1660	1620	2.26	580	340	6.3	2570	--	27.0
17...	.5	.44	420	1640	1560	2.23	530	300	6.4	2560	--	26.5

09534000 MAIN DRAIN AT SOUTHERLY INTERNATIONAL BOUNDARY NEAR SAN LUIS, ARIZ.--Continued

BIOLOGICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Time	Instantaneous discharge (cfs)	Fecal coliform (col. per 100 ml)
OCT.			
17...	0930	--	310
NOV.			
13...	1330	--	690
DEC.			
18...	1200	--	200
JAN.			
17...	1000	--	230
FEB.			
18...	1400	143	90
MAR.			
20...	1400	150	143

09534000 MAIN DRAIN AT SOUTHERLY INTERNATIONAL BOUNDARY NEAR SAN LUIS, ARIZ.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DIELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
OCT.											
18...	1215	210	.00	.0	.00	.00	.00	.00	.00	.00	.00
NOV.											
14...	1200	133	.00	.0	.00	.00	.00	.00	.00	.00	.00
DEC.											
19...	1140	136	.00	.0	.00	.00	.00	.00	.00	.00	.00
JAN.											
18...	1345	140	.00	.0	.00	.00	.00	.00	.00	.00	.00
FEB.											
13...	1235	148	.00	.0	.00	.00	.00	.00	.00	.00	.00
MAR.											
27...	1130	--	.00	.0	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	TOXAPHENE (UG/L)	DIAZINON (UG/L)	MALATHION (UG/L)	PARATHION (UG/L)	METHYL PARATHION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	PCB (UG/L)	TEMPERATURE (DEG C)
OCT.											
18...	.00	0	.00	.00	.02	.00	.00	.00	.00	.0	24.0
NOV.											
14...	.00	0	.00	.00	.00	.00	.00	.00	.00	.0	19.0
DEC.											
19...	.00	0	.00	.00	.00	.00	.80	.00	.00	.0	15.5
JAN.											
18...	.00	0	.00	.00	.00	.00	.05	.00	.00	.0	19.5
FEB.											
13...	.00	0	.00	.00	.28	.11	.21	.00	.00	.0	17.0
MAR.											
27...	.00	0	.00	.00	.00	.00	.04	.00	.00	.0	22.0

09534300 WEST MAIN CANAL WASTEWAY AT ARIZONA-SONORA BOUNDARY
(Formerly published as West Main Canal wasteway at San Luis, Ariz.)

LOCATION.--Lat 32°29'29", long 114°47'39", in SE¼NE¼ sec.11, T.11 S., R.25 W., Yuma County, at gaging station, 150 ft (50 m) upstream from outlet into Main drain, 300 ft (100 m) north of international boundary, 0.2 mi (0.3 km) west of San Luis, Ariz., and 19 mi (30 km) south of Yuma.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	0850	16	9.5	0	90	33	140	5.4	165	0	340	120
25...	0850	26	7.0	--	93	34	150	7.2	172	0	360	130
NOV.												
05...	0950	24	8.9	20	94	34	160	5.9	162	2	350	140
19...	0910	4.1	8.0	10	94	35	150	5.8	166	3	370	150
DEC.												
03...	0915	6.1	7.3	10	96	36	170	5.5	176	0	380	160
17...	1030	5.0	8.4	10	93	33	160	6.2	170	0	380	150
JAN.												
07...	0850	1.4	9.2	0	93	33	150	5.2	175	0	350	140
28...	0900	8.9	9.6	10	97	34	160	5.6	165	0	350	150
FEB.												
05...	0930	1.4	8.6	10	90	31	150	5.6	160	1	360	130
19...	0930	8.9	8.6	20	92	32	140	6.0	165	1	340	130
MAR.												
05...	0920	1.9	8.2	40	95	33	140	5.7	172	0	370	120
19...	0910	7.2	6.3	10	88	32	150	5.7	160	0	350	130
APR.												
02...	0940	6.1	5.6	30	87	31	130	5.8	152	0	330	120
26...	0910	7.9	8.5	180	96	33	130	5.4	173	0	340	120
MAY												
07...	0900	30	7.4	30	94	32	130	5.4	176	0	340	120
28...	0855	.80	6.3	20	91	33	150	5.4	165	0	360	140
JUNE												
04...	0930	3.7	7.2	50	92	33	130	5.1	162	0	340	120
21...	0900	5.6	8.3	10	91	32	120	4.9	169	0	300	120
JULY												
05...	0850	5.4	8.7	40	91	31	130	6.1	--	1	330	120
16...	0950	23	8.9	20	87	31	120	5.2	159	0	330	110
AUG.												
06...	0930	1.6	9.6	10	76	31	130	6.1	128	0	340	120
20...	0855	12	8.8	20	78	31	120	5.9	131	0	300	110
SEP.												
17...	0830	3.1	10	40	84	32	140	7.0	158	--	310	140

09534300 WEST MAIN CANAL WASTEWAY AT ARIZONA-SONORA BOUNDARY--Continued

PERIOD OF RECORD.--Chemical analyses: March 1971 to current year.

REMARKS.--No flow Apr. 16, 28, May 2, Sept. 13.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
01...	.4	.05	190	844	820	1.15	360	230	3.2	1280	8.3	26.0
25...	.5	--	--	880	868	1.20	370	229	3.4	1350	8.2	--
NOV.												
05...	.4	.05	200	930	876	1.26	370	240	3.6	1380	8.4	15.0
19...	.4	.08	150	906	899	1.23	380	240	3.4	1410	8.4	11.5
DEC.												
03...	.4	.08	230	922	943	1.25	390	240	3.8	1460	8.2	8.0
17...	.4	.13	190	894	916	1.22	370	230	3.6	1390	8.3	11.0
JAN.												
07...	.5	.18	180	846	868	1.15	370	220	3.4	1370	8.3	9.5
28...	.5	.22	220	914	899	1.24	380	230	3.6	1440	8.3	9.0
FEB.												
05...	.3	.13	200	842	856	1.15	350	220	3.5	1310	8.4	11.0
19...	.4	.14	200	834	832	1.13	360	220	3.2	1320	8.4	11.5
MAR.												
05...	.4	.18	160	840	858	1.14	370	230	3.2	1300	8.2	10.0
19...	.5	.03	190	820	842	1.12	350	220	3.5	1320	8.2	19.5
APR.												
02...	.5	.13	180	802	786	1.09	350	220	3.0	1250	8.0	16.5
26...	.4	.14	180	830	820	1.13	360	230	2.9	1290	8.1	20.0
MAY												
07...	.5	.14	180	868	817	1.18	370	220	3.0	1310	8.2	21.5
28...	.5	.00	220	880	868	1.20	360	230	3.4	1380	7.5	25.5
JUNE												
04...	.3	.06	170	814	808	1.11	370	230	3.0	1300	8.1	22.0
21...	.5	.08	180	790	761	1.07	360	220	2.8	1240	8.4	25.5
JULY												
05...	.4	.06	180	800	--	1.09	360	--	3.0	1250	8.4	26.5
16...	.4	.12	170	772	772	1.05	350	210	2.8	1220	8.3	--
AUG.												
06...	.4	.03	180	780	777	1.06	320	210	3.2	1210	--	30.0
20...	.4	.20	170	762	720	1.04	320	220	2.9	1190	8.3	28.5
SEP.												
17...	.4	.52	200	882	804	1.09	340	210	3.3	1330	--	26.0

09534500 EAST MAIN CANAL WASTEWAY AT ARIZONA-SONORA BOUNDARY
(Formerly published as East Main Canal wasteway at San Luis, Ariz.)

LOCATION.--Lat 32°29'13", long 114°47'01", in NW¼SW¼ sec.12, T.11 S., R.25 W., Yuma County, at gaging station, 0.2 mi (0.3 km) east of Main drain pumping plant, and 0.2 mi (0.3 km) west of San Luis.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.												
01...	0900	6.3	9.9	10	86	37	170	4.8	144	0	360	170
25...	0900	3.2	8.0	--	86	40	175	6.5	160	0	380	175
NOV.												
05...	1045	38	9.6	20	92	34	160	5.7	161	4	340	150
19...	0920	16	9.4	10	100	39	190	6.4	171	0	400	210
DEC.												
03...	0930	17	12	0	110	42	220	5.7	190	0	420	240
17...	1015	3.9	8.5	10	100	37	180	6.1	170	0	370	190
JAN.												
08...	0845	18	5.6	10	94	33	170	5.4	156	0	370	180
21...	0840	24	12	10	130	44	260	6.2	212	0	450	300
FEB.												
08...	0915	13	9.1	20	110	38	170	5.7	173	--	370	190
19...	0930	22	8.9	10	100	36	170	6.3	179	0	350	190
MAR.												
05...	0930	6.8	7.1	20	100	36	170	6.2	164	0	360	180
22...	0845	2.1	6.3	10	130	48	230	7.2	155	0	410	320
APR.												
02...	0930	18	6.8	20	98	35	170	5.8	165	0	360	170
16...	0910	1.2	2.8	20	68	31	140	5.0	96	0	370	120
MAY												
07...	0935	12	6.3	20	92	35	160	5.6	153	0	360	160
21...	0910	17	7.6	20	120	39	170	6.0	180	0	350	210
JUNE												
07...	0845	18	7.4	20	96	36	160	5.3	170	0	360	150
JULY												
02...	0920	17	9.0	10	94	32	150	6.3	157	0	330	140
16...	0950	7.2	10	10	90	36	150	5.4	149	0	340	160
AUG.												
06...	0935	11	10	10	87	34	150	6.4	147	--	340	160
SEP.												
03...	0900	8.1	10	20	85	36	140	5.4	134	--	330	160
17...	0830	15	11	30	77	34	160	6.9	115	--	350	170

09534500 EAST MAIN CANAL WASTEWAY AT ARIZONA-SONORA BOUNDARY--Continued

REMARKS.--No flow Jan 1, 15, Mar. 18, Apr. 17, May 11, June 18, Aug. 8, 20-24, Sept. 10. Unpublished miscellaneous chemical analyses for water years 1962-65, and continuing-record analyses for water years 1966-68 available from district office in Tucson, Ariz.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.												
01...	.6	.01	220	912	910	1.24	370	250	3.9	1430	8.1	26.0
25...	.6	--	--	976	951	1.33	380	249	3.9	1520	8.2	--
NOV.												
05...	.3	.12	200	904	876	1.23	370	230	3.6	1370	8.4	15.5
19...	.4	.26	190	1090	1040	1.48	410	270	4.1	1620	8.2	11.0
DEC.												
03...	.5	.42	260	1140	1150	1.55	450	290	4.5	1800	8.3	9.0
17...	.5	.34	210	966	978	1.31	400	260	3.9	1570	8.2	9.5
JAN.												
08...	.5	.08	210	852	936	1.16	370	240	3.8	1470	8.1	9.5
21...	.6	.28	320	1300	1310	1.77	510	330	5.0	2050	8.2	14.5
FEB.												
08...	.4	.34	240	978	980	1.33	430	290	3.6	1550	8.3	12.0
19...	.6	.22	220	944	951	1.28	400	250	3.7	1550	8.1	12.0
MAR.												
05...	.5	.06	200	986	941	1.34	400	260	3.7	1520	8.2	11.5
22...	.5	.03	270	1250	1230	1.70	520	400	4.4	2010	7.9	17.0
APR.												
02...	.5	.07	210	968	928	1.32	390	250	3.8	1490	8.2	18.0
16...	.4	.03	190	788	785	1.07	300	220	3.5	1210	7.9	16.5
MAY												
07...	.5	.08	210	914	895	1.24	370	250	3.6	1460	8.3	21.5
21...	.4	.11	220	1030	992	1.40	460	310	3.4	1630	8.0	19.5
JUNE												
07...	.4	.05	220	922	899	1.25	390	250	3.5	1440	8.2	22.0
JULY												
02...	.4	.03	200	880	839	1.20	370	240	3.4	1370	8.2	26.0
16...	.4	.06	200	898	866	1.22	370	250	3.4	141[illegible]	8.3	--
AUG.												
06...	.4	.01	210	888	861	1.21	360	240	3.5	1380	--	30.5
SEP.												
03...	.5	.01	230	910	833	1.24	360	250	3.2	1430	--	25.5
17...	.4	.03	220	964	869	1.31	330	240	3.8	1440	--	26.0

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

LITTLE COLORADO RIVER BASIN

09401240 MOENKOPI WASH NEAR SHONTO (LAT 36°24'51", LONG 110°27'28")

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
DEC., 1973								
13...	1100	1.5	15	20	330	170	220	8.3
MAR., 1974								
13...	1220	1.1	15	170	340	170	220	11
MAY								
08...	1200	.08	15	80	290	170	260	14
JULY								
25...	1200	1.0	20	40	330	160	220	12
SEP.								
18...	1100	.90	11	50	290	140	170	10

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
DEC., 1973									
13...	255	0	1700	26	.5	1.8	.04	130	2810
MAR., 1974									
13...	284	0	1700	26	.5	2.4	.02	120	2840
MAY									
08...	294	0	1700	26	.6	.05	.01	160	2820
JULY									
25...	285	0	1700	26	.5	1.3	.01	200	2840
SEP.									
18...	223	--	1400	22	.8	2.7	.04	140	2360

DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
DEC., 1973								
13...	2620	3.82	1500	1300	2.5	3032	7.9	.0
MAR., 1974								
13...	2630	3.86	1600	1300	2.4	3090	7.9	17.0
MAY								
08...	2600	3.84	1400	1200	3.0	3050	8.1	--
JULY								
25...	2610	3.86	1500	1300	2.5	3010	7.9	--
SEP.								
18...	2170	3.21	1300	1100	2.1	2500	--	20.0

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

LITTLE COLORADO RIVER BASIN

09401250 MOENKOPI WASH NEAR MOENKOPI, ARIZ. (LAT 36°06'36", LONG 111°09'19")

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT., 1973								
03...	0930	1.1	7.9	50	73	24	140	4.7
DEC.								
12...	1145	1.7	7.9	30	75	21	110	4.0
MAR., 1974								
11...	1400	3.0	8.6	50	110	32	110	5.7
JULY								
19...	1315	270	15	50	530	150	240	15
22...	1300	47	14	50	300	72	120	10
23...	1330	5.8	13	30	270	66	110	9.6
SEP.								
03...	1040	.14	8.3	50	140	46	190	6.4
19...	1030	1.2	8.4	50	120	36	150	7.6

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT., 1973									
03...	231	7	380	14	.8	.03	.02	120	824
DEC.									
12...	230	0	290	12	.5	.23	.02	90	640
MAR., 1974									
11...	219	0	440	12	.7	.38	.01	80	865
JULY									
19...	248	0	2300	24	.5	.65	.02	230	3640
22...	168	0	1100	13	.6	1.7	.02	160	1850
23...	153	0	1000	13	.8	.62	.01	160	1760
SEP.									
03...	208	0	680	22	.8	.10	.01	200	1330
19...	187	--	580	14	.7	.15	.00	130	1080

DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT., 1973								
03...	766	1.12	280	80	3.6	1130	8.4	11.0
DEC.								
12...	635	.87	270	85	2.9	943	8.3	4.0
MAR., 1974								
11...	829	1.18	410	230	2.4	1200	8.2	17.0
JULY								
19...	3400	4.95	1900	1700	2.4	2250	7.1	25.5
22...	1720	2.52	1000	910	1.6	1400	7.3	28.8
23...	1560	2.39	950	820	1.6	1600	7.4	31.0
SEP.								
03...	1200	1.81	540	370	3.6	1600	8.1	22.5
19...	1010	1.47	450	290	3.1	1400	8.1	19.0

ANALYSES OF SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

09531900 MAIN OUTLET DRAIN EXTENSION BELOW MORELOS DAM, ARIZ. (M.O.D.E. 3)
(LAT 32°42'16", LONG 114°43'32")

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5960	5980	6150	6060	5980	6140	6120	5820	6030	5910	5820	5690
2	5880	5930	6050	5970	5990	6110	6160	5950	5930	5910	5790	5690
3	5880	5970	5930	5910	6030	6130	6060	5900	5460	5880	5820	5590
4	5860	5890	5900	5890	5760	6130	6160	5930	5370	5850	5870	5780
5	5960	5850	5720	5830	5760	6080	6050	5920	5350	5900	5850	5840
6	5910	5890	5930	5810	5730	6160	6020	6020	5500	5750	5880	5850
7	5950	5900	6110	5890	5500	6100	5950	5980	6860	5840	5890	5820
8	5840	5840	6070	5830	5510	6140	5920	5950	5200	5890	5870	5820
9	5590	5800	6090	5850	5470	6160	5490	6020	5820	5930	5840	5810
10	5780	5880	6070	5900	6180	6220	5880	5950	5870	5880	5850	5800
11	5900	5930	6050	5890	6160	6180	5860	5880	5910	5860	5840	5900
12	5850	5880	6090	5900	6130	6240	6150	5620	5990	5910	5860	5670
13	5790	5900	6290	5880	6020	6060	5930	5600	5830	5910	5820	5770
14	5950	5920	6180	5870	6070	6140	5920	5650	6080	5840	5690	5690
15	5980	5970	6110	5870	6250	6110	5870	5610	6070	5800	5790	5770
16	5990	5950	6090	5850	6260	6080	5830	5610	6060	5880	5800	5670
17	5740	5980	6080	5870	6290	6080	5870	5870	6040	---	5700	5860
18	5850	5990	5900	5850	6270	6000	5880	5880	6030	5920	5730	5640
19	6170	6030	6060	5770	6250	6060	5880	5920	6010	5920	5840	5610
20	6080	6040	6010	5830	6220	6240	5910	5940	6040	5920	5780	5780
21	6090	6190	6020	5710	6250	6130	5990	5870	6040	5930	5840	---
22	6080	6160	5960	5830	6210	6090	5880	5990	6030	5780	5850	---
23	6040	6190	6000	5830	6220	6020	5870	6010	6100	5850	5670	5350
24	6110	6160	5980	6000	6160	6040	5840	6010	6100	5780	5730	5880
25	6050	5790	6020	5880	6050	6090	5890	6110	6070	5760	5800	5890
26	6070	6050	6050	5980	6010	6080	5870	5850	5930	5860	5740	5830
27	6020	6070	6040	5930	6060	6070	5830	5900	6090	5730	5750	5750
28	6120	6050	6070	6040	6030	6080	5860	6000	5960	5820	5810	5750
29	5960	6160	6060	6070	---	6050	5900	6000	5880	5850	5810	5690
30	6020	5780	6010	6090	---	6130	5850	5960	5910	5810	5760	5660
31	5980	---	6050	5920	---	6110	---	6040	---	5780	5760	---
MEAN	5950	5970	6040	5900	6030	6110	5920	5900	5920	5860	5800	5740
YEAR	MAX	6860	MIN	5200	MEAN	5930						

MISCELLANEOUS ANALYSES OF STREAMS IN ARIZONA,
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
LITTLE COLORADO RIVER BASIN													
09393500 SILVER CREEK NEAR SNOWFLAKE, ARIZ. (LAT 34°40'00", LONG 110°02'30")													
MAY , 1974 15...	1200	1.1	18	10	36	46	40	7.3	349	5	53	27	.3
09394500 LITTLE COLORADO RIVER AT WOODRUFF, ARIZ. (LAT 34°46'58", LONG 110°02'37")													
MAY , 1974 15...	1340	3.4	13	10	39	25	34	4.3	210	4	65	30	.4
09397000 LITTLE COLORADO RIVER AT HOLBROOK, ARIZ. (LAT 34°53'52", LONG 110°09'45")													
MAY , 1974 14...	1145	3.6	12	10	79	37	240	5.6	210	0	170	370	.3
09397300 LITTLE COLORADO RIVER NEAR JOSEPH CITY, ARIZ. (LAT 34°54'04", LONG 110°15'17")													
MAY , 1974 14...	1530	2.8	8.0	10	65	36	180	5.9	203	13	170	250	.5
09398500 CLEAR CREEK BELOW WILLOW CREEK, NEAR WINSLOW, ARIZ. (LAT 34°40'03", LONG 111°00'25")													
MAR., 1974 27...	1530	256	3.7	130	5.3	2.2	1.3	.5	21	0	5.3	1.1	.1
340225109180300 WATER CANYON AT ELDERBERRY SPRING, ARIZ. (LAT 34°02'25", LONG 109°18'03")													
AUG., 1974 14...	1000	.10	25	40	27	9.6	10	2.0	146	0	5.3	2.7	.1
343141110044700 SILVER CREEK AT SNOWFLAKE, ARIZ. (LAT 34°31'41", LONG 110°04'47")													
MAY , 1974 15...	1125	2.5	25	70	68	35	26	6.4	384	0	42	12	.3
343604110041700 SILVER CREEK AT RHOTON TRAIL, ARIZ. (LAT 34°36'04", LONG 110°04'17")													
MAY , 1974 15...	1300	1.4	26	10	55	43	34	6.4	395	0	49	22	.3
344428110021900 LITTLE COLORADO RIVER BELOW SILVER CREEK, ARIZ. (LAT 34°44'28", LONG 110°02'19")													
MAY , 1974 15...	1500	4.6	13	120	42	24	30	4.0	202	3	58	23	4

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DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
LITTLE COLORADO RIVER BASIN												
09393500 SILVER CREEK NEAR SNOWFLAKE, ARIZ. (LAT 34°40'00", LONG 110°02'30")--Continued												
MAY , 1974 15...	.00	.01	100	409	405	.56	280	0	1.0	660	8.4	19.0
09394500 LITTLE COLORADO RIVER AT WOODRUFF, ARIZ. (LAT 34°46'58", LONG 110°02'37")--Continued												
MAY , 1974 15...	.03	.02	60	331	319	.45	200	21	1.0	524	8.5	22.5
09397000 LITTLE COLORADO RIVER AT HOLBROOK, ARIZ. (LAT 34°53'52", LONG 110°09'45")--Continued												
MAY , 1974 14...	.04	.00	110	1070	1020	1.46	350	180	5.6	1840	8.1	23.0
09397300 LITTLE COLORADO RIVER NEAR JOSEPH CITY, ARIZ. (LAT 34°54'04", LONG 110°15'17")--Continued												
MAY , 1974 14...	.01	.26	180	866	830	1.18	310	120	4.4	1460	8.8	26.0
09398500 CLEAR CREEK BELOW WILLOW CREEK, NEAR WINSLOW, ARIZ. (LAT 34°40'03", LONG 111°00'25")--Continued												
MAR., 1974 27...	.03	.02	30	48	30	.07	22	5	.1	52	7.2	6.5
340225109180300 WATER CANYON AT ELDERBERRY SPRING, ARIZ. (LAT 34°02'25", LONG 109°18'03")--Continued												
AUG., 1974 14...	.01	.02	20	152	154	.21	110	0	.4	250	7.9	16.0
343141110044700 SILVER CREEK AT SNOWFLAKE, ARIZ. (LAT 34°31'41", LONG 110°04'47")--Continued												
MAY , 1974 15...	.13	.09	70	421	405	.57	310	0	.6	675	8.0	18.0
343604110041700 SILVER CREEK AT RHOTON TRAIL, ARIZ. (LAT 34°36'04", LONG 110°04'17")--Continued												
MAY , 1974 15...	.05	.04	90	432	431	.59	310	0	.8	697	8.3	18.0
344428110021900 LITTLE COLORADO RIVER BELOW SILVER CREEK, ARIZ. (LAT 34°44'28", LONG 110°02'19")--Continued												
MAY , 1974 15...	.09	.00	50	325	298	.44	200	33	.9	514	8.4	20.0

MISCELLANEOUS ANALYSES OF STREAMS IN ARIZONA,
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
LITTLE COLORADO RIVER BASIN													
344931110035000 LITTLE COLORADO RIVER BELOW WOODRUFF, ARIZ. (LAT 34°49'31", LONG 110°03'50")													
MAY , 1974 15...	1640	2.5	11	20	38	27	35	5.0	212	4	63	25	.4
345313110035000 LITTLE COLORADO RIVER ABOVE PUERCO RIVER, ARIZ. (LAT 34°53'13", LONG 110°03'50")													
MAY , 1974 15...	1745	3.9	12	10	80	36	240	5.5	214	0	160	360	.3
345630110192500 LITTLE COLORADO RIVER ABOVE JOSEPH CITY BRIDGE AT JOSEPH CITY, ARIZ. (LAT 34°56'30", LONG 110°19'25")													
MAY , 1974 14...	1630	.13	12	10	190	100	680	7.0	213	0	460	1200	.3
345702110203000 LITTLE COLORADO RIVER BELOW JOSEPH CITY, ARIZ. (LAT 34°57'02", LONG 110°20'30")													
MAY , 1974 14...	1100	.10	8.3	40	150	79	690	12	270	0	410	1100	.6
345707110312900 LITTLE COLORADO RIVER BELOW CHENTON CREEK, ARIZ. (LAT 34°57'07", LONG 110°31'29")													
MAY , 1974 16...	1500	4.2	3.1	10	74	48	790	7.2	240	3	210	1200	.2
345911110381400 LITTLE COLORADO RIVER ABOVE CLEAR CREEK, ARIZ. (LAT 34°59'11", LONG 110°38'14")													
MAY , 1974 16...	1215	1.2	2.6	20	96	63	1000	8.7	245	0	300	1500	.3
345915110381900 LITTLE COLORADO RIVER BELOW CLEAR CREEK, ARIZ. (LAT 34°59'15", LONG 110°38'19")													
MAY , 1974 16...	1220	5.6	4.7	10	77	49	890	7.0	232	0	240	1300	.3
360849111015800 LOWER COAL MINE WASH AT MOUTH AT MOENKOPI WASH, ARIZ. (LAT 36°08'49", LONG 111°01'58")													
DEC., 1973 12...	1415	.20	11	40	82	27	380	6.0	516	0	700	19	1.0
360907110593600 BEGASHIBITO WASH AT MOUTH NEAR TONALEA, ARIZ. (LAT 36°09'07", LONG 110°59'36")													
DEC., 1973 12...	1515	--	9.3	80	67	18	56	3.0	270	0	130	15	.4

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
LITTLE COLORADO RIVER BASIN												
344931110035000 LITTLE COLORADO RIVER BELOW WOODRUFF, ARIZ. (LAT 34°49'31", LONG 110°03'50")--Continued												
MAY , 1974												
15...	.03	.00	60	327	313	.44	210	25	1.1	542	8.4	23.5
345313110035000 LITTLE COLORADO RIVER ABOVE PUERCO RIVER, ARIZ. (LAT 34°53'13", LONG 110°03'50")--Continued												
MAY , 1974												
15...	.00	.00	90	1030	999	1.40	350	170	5.6	1840	8.2	20.5
345630110192500 LITTLE COLORADO RIVER ABOVE JOSEPH CITY BRIDGE AT JOSEPH CITY, ARIZ. (LAT 34°56'30", LONG 110°19'25")--Continued												
MAY , 1974												
14...	.00	.01	360	2920	2750	3.97	890	710	9.9	4900	8.0	23.0
345702110203000 LITTLE COLORADO RIVER BELOW JOSEPH CITY, ARIZ. (LAT 34°57'02", LONG 110°20'30")--Continued												
MAY , 1974												
14...	3.7	3.0	690	2730	2610	3.71	700	480	11	4610	7.2	25.5
345707110312900 LITTLE COLORADO RIVER BELOW CHENTON CREEK, ARIZ. (LAT 34°57'07", LONG 110°31'29")--Continued												
MAY , 1974												
16...	.00	.01	150	2470	2450	3.36	380	180	18	4340	8.4	23.0
345911110381400 LITTLE COLORADO RIVER ABOVE CLEAR CREEK, ARIZ. (LAT 34°59'11", LONG 110°38'14")--Continued												
MAY , 1974												
16...	.02	.00	230	3180	3090	4.32	500	300	19	5700	8.2	23.5
345915110381900 LITTLE COLORADO RIVER BELOW CLEAR CREEK, ARIZ. (LAT 34°59'15", LONG 110°38'19")--Continued												
MAY , 1974												
16...	.03	.00	180	2780	2680	3.78	390	200	20	5020	8.2	23.5
360849111015800 LOWER COAL MINE WASH AT MOUTH AT MOENKOPI WASH, ARIZ. (LAT 36°08'49", LONG 111°01'58")--Continued												
DEC., 1973												
12...	.16	.02	180	1460	1480	1.99	320	0	9.3	2112	8.1	4.0
360907110593600 BEGASHIBITO WASH AT MOUTH NEAR TONALEA, ARIZ. (LAT 36°09'07", LONG 110°59'36")--Continued												
DEC., 1973												
12...	.12	.02	80	432	433	.59	240	20	1.6	675	8.3	1.5

MISCELLANEOUS ANALYSES OF STREAMS IN ARIZONA,
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
BILL WILLIAMS RIVER BASIN													
09424470 KIRKLAND CREEK NEAR KIRKLAND, ARIZ. (LAT 34°23'38", LONG 112°43'19")													
JULY, 1974 30...	1000	1.8	49	40	58	16	19	3.4	261	0	24	20	.4

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	HEXAVALENT CHROMIUM (CR6) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
JULY, 1974 30...	1000	1.8	4	60	0	0	0	1

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
343710113182000 BURRO CREEK ABOVE BOULDER CREEK, ARIZ. (LAT 34°37'10", LONG 113°18'20")													
OCT., 1973 31...	1230	--	36	20	39	21	36	7.2	276	0	15	23	.4
TYSON WASH BASIN													
09428900 TYSON WASH AT QUARTZSITE, ARIZ. (LAT 33°39'57", LONG 114°13'12")													
JULY, 1974 23...	1310	3.3	3.2	50	26	.9	3.7	4.8	84	0	6.4	6.8	.1
23...	1435	--	6.8	200	54	3.5	2.5	7.5	190	0	4.1	2.0	.1
GILA RIVER BASIN													
09519800 GILA RIVER BELOW PAINTED ROCK DAM, ARIZ. (LAT 33°04'30", LONG 113°00'50")													
APR., 1974 18...	1205	--	9.0	20	57	24	170	8.1	183	0	100	260	1.5

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DIELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)	LINDANE (UG/L)
NOV., 1973 27...	0900	300	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
BILL WILLIAMS RIVER BASIN												
09424470 KIRLAND CREEK NEAR KIRKLAND, ARIZ. (LAT 34°23'38", LONG 112°43'19")--Continued												
JULY, 1974												
30...	.42	.09	60	325	321	.44	210	0	.6	490	7.9	27.0

DATE	CYANIDE (CN) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED MOLYB-DENUM (MO) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JULY, 1974							
30...	.00	40	0	.0	2	0	10

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
343710113182000 BURRO CREEK ABOVE BOULDER CREEK, ARIZ. (LAT 34°37'10", LONG 113°18'20")--Continued												
OCT., 1973												
31...	.29	.08	140	317	315	.43	180	0	1.2	520	8.2	22.0
TYSON WASH BASIN												
09428900 TYSON WASH AT QUARTZSITE, ARIZ. (LAT 33°39'57", LONG 114°13'12")--Continued												
JULY, 1974												
23...	.68	--	90	--	96	.13	69	0	.2	172	7.4	--
23...	1.2	--	120	--	180	.24	150	0	.1	308	7.0	--
GILA RIVER BASIN												
09519800 GILA RIVER BELOW PAINTED ROCK DAM, ARIZ. (LAT 33°04'30", LONG 113°00'50")--Continued												
APR., 1974												
18...	.03	--	310	718	720	.98	240	91	4.8	1330	8.[illegible]	--

DATE	TOX-APHENE (UG/L)	DI-AZINON (UG/L)	MALA-THION (UG/L)	PARA-THION (UG/L)	METHYL PARA-THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	PCB (UG/L)	TEMPER-ATURE (DEG C)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV., 1973											
27...	0	.00	.00	.00	.00	.00	.00	.00	.0	15.0	6.0

MISCELLANEOUS ANALYSES OF STREAMS IN ARIZONA,
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
GILA RIVER BASIN													
341420112325300 HASSAYAMPA RIVER AT MOUTH OF MILK CREEK, ARIZ. (LAT 34°14'20", LONG 112°32'53")													
MAY , 1974 08...	1300	2.0	26	130	74	21	23	1.4	283	0	70	17	.8
DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM													
09530300 CITY OF YUMA OUTFALL DRAIN AT YUMA, ARIZ. (LAT 32°44'00", LONG 114°39'51")													
FEB., 1974 27...	0815	--	15	70	93	34	260	17	347	0	340	270	1.7

MISCELLANEOUS ANALYSES OF STREAMS IN ARIZONA,
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180°C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
GILA RIVER BASIN												
341420112325300 HASSAYAMPA RIVER AT MOUTH OF MILK CREEK, ARIZ. (LAT 34°14'20", LONG 112°32'53")--Continued												
MAY , 1974 08...	.08	.02	100	1320	373	1.80	270	29	.6	613	7.9	22.0
DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM												
09530300 CITY OF YUMA OUTFALL DRAIN AT YUMA, ARIZ. (LAT 32°44'00", LONG 114°39'51")--Continued												
FEB., 1974 27...	.11	--	810	--	1200	1.63	370	88	5.9	2050	7.3	--

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